OXFORDSHIRE COUNTY COUNCIL

Implementing 'Decide & Provide': Requirements for Transport Assessments

Updated final draft, December 2025

Contents

Executive Summary

Oxfordshire County Council's (OCC) Local Transport and Connectivity Plan (LTCP), adopted July 2022, outlines a clear vision to deliver a net-zero Oxfordshire transport and travel system by 2040, improving health and wellbeing, tackling the climate emergency, reducing private vehicle use, and prioritising walking, wheeling, cycling, and public transport.

In order to achieve this, fundamental changes to the way the county's transport and travel system functions will need to be made. Such a substantial undertaking will necessarily entail a multi-pronged approach to reshaping the way places are connected and needs to start from a comprehensive rethinking of spatial and transport planning, beginning at a strategic level and continuing throughout all stages of planning.

Stemming from the framework set out in the LTCP there will be numerous strategies which will contribute to setting out how the transport and travel system is upgraded and reconfigured in order to achieve these aspirations. Amongst these, the forthcoming movement and place strategies will be key, as will OCC's new Parking Standards for New Developments (2026) document and the Street Design Guide (2024), which will help to ensure sites are master-planned to give priority to high-quality walking, wheeling, cycling, and public transport provision.

As set out in Policy 36 of the LTCP, another significant element of realising these aims will be to make the shift from an approach to transport planning characterised as 'predict and provide' towards adopting a 'decide and provide' approach instead.

This document was originally adopted in September 2022 as a formal supplementary document to the LTCP and details how the 'decide and provide' approach is to be implemented through the transport assessments (or transport statements) and infrastructure delivery mechanisms which accompany planning applications for proposed development. In December 2024 changes were made to the National Planning Policy Framework (NPPF), which now requires transport assessments and transport statements to be vision-led. This updated version of Implementing Decide & Provide reflects those changes and sets out how this requirement is expected to be met within Oxfordshire.

This document is primarily intended for use by developers and their consultants, transport officers at the county, and planning officers at the district and city councils. It applies to all developments but will be particularly pertinent to large residential and employment sites that are expected to generate significant travel demand (see paragraph 1.1.5 for more on this). Further information on scenario scoping is provided in section 3.2 (pp.15-17).

The document is based on guidance that TRICS (2021) has produced, called the 'Guidance Note on the Practical Implementation of the Decide & Provide Approach' with further detail and requirements provided relevant to the LTCP.

It is set out in three main parts: the first outlines the guiding principles that underpin this approach; the second discusses how potential traffic impacts are to be modelled and how trip rates should be appropriately evidenced; and the final part details the process, split into sixteen steps, for implementing the approach through transport assessments by modelling a range of plausible scenarios and monitoring and managing outcomes. The process is summarised in the flow-diagram (Appendix 1), accompanied by a worked example (Appendix 2), and a methodology checklist (Appendix 3).

PART ONE | Guiding Principles of Decide & Provide and Vision-Led Planning

This first part of the document explains the principles underpinning the 'decide and provide' approach; how transport assessments have been undertaken in the past; how this approach is based on the TRICS guidance; the role that this document plays as part of a wider set of strategies to decarbonise the transport network; and how this document relates to the NPPF (Ministry of Housing, Communities and Local Government, 2024), the vision-led approach to transport planning, and the policies of the county's five Local Plans.

1.1 'Decide and Provide' instead of 'Predict and Provide'

1.1.1 As outlined in the LTCP, 'predict and provide' can be broadly described as an approach to transport planning that uses current or historical traffic patterns to determine the future need for infrastructure. However, this approach tends to simply maintain the status quo by perpetuating dependence on the private car through provision of additional highway capacity for more private cars.

1.1.2 By contrast, the 'decide and provide' approach to transport planning decides on a preferred vision of the future and then provides the means to work towards that whilst also accommodating uncertainty about the future. This offers the opportunity for more positive transport planning and will help to implement the LTCP transport user hierarchy by considering walking, wheeling, cycling and public transport upfront.

1.1.3 This document is about fundamentally changing the focus of transport assessments. Instead of measuring a development's impact in terms of private vehicle trips and then providing additional highway capacity for those trips, a transport assessment's primary focus must instead be about understanding how a development proposal can ensure that measures are in place to enable people to move to, from, and within a site by walking, wheeling, cycling, and public transport, thus minimising the need to use private vehicles. This must be the founding principle of any transport assessment from which everything else then follows.

1.1.4 As suggested by the reference to 'a preferred vision' above, the decide and provide approach can also be described as the vision-led approach to transport planning and is sometimes also referred to as 'vision and validate'. While there might be some subtle differences in how these terms are conceptualised, and different views on the specifics of associated methodologies, they encapsulate the same principles. As such, this document sets out how OCC requires development proposals to follow a vision-led approach to transport planning. This approach is captured in LTCP Policy 36 (2024, p.106), which states that:

> We will:
>
> a. Only consider road capacity schemes after all other options have been explored.
>
> b. Where appropriate, adopt a decide and provide approach to manage and develop the county's road network.
>
> c. Assess opportunities for traffic reduction as part of any junction or road route improvement schemes.
>
> d. Require transport assessments accompanying planning applications for new development to follow the County Council's 'Implementing 'Decide & Provide': Requirements for Transport Assessments' document.
>
> e. Promote the use of the 'decide and provide' approach in planning policy development to support site assessment.

1.1.5 The methodology in this document is designed for development proposals (spanning Use Classes B-F and most Sui Generis uses). While the underpinning principles are the same, transport and travel-related projects developed by OCC will require a separate vision-led approach using a methodology specific to transport scheme development.

1.1.6 Transport Assessments (TAs) and Transport Statements (TSs) for all development proposals must include written commentary on how the sixteen steps (set out in Part Three) of Implementing Decide & Provide have been followed with justification and rationale provided to explain any parts of the methodology that have been omitted (with appropriate reference to Table 1, p.19). To supplement this, the methodology checklist at Appendix 3 must be completed and appended to all TAs and TSs.

1.2 Transport Assessments and the TRICS database

1.2.1 Traditionally, standard practice has been for TAs for large residential and employment sites to use data from the TRICS database to determine the anticipated vehicular trip generation (or trip rates) of a proposed development based on recent traffic survey data for comparable sites across the country.

1.2.2 Combined with census data from the Office for National Statistics (ONS) to determine geographical distribution patterns, trip rates have then been used to identify the potential traffic impact on the highway network, and in combination with the identification of connectivity needs for active and sustainable modes, transport modelling has then been used to identify where capacity on the network is exceeded.

1.2.3 Typically, developers have been required to improve junctions that have been forecast to be over capacity in future years where issues arise as a direct result of impacts attributable to their development proposal. Alternatively, in locations where more comprehensive intervention has been identified as necessary, they have made financial contributions towards strategic schemes to be delivered by OCC. This tends to be in cases where third-party land is required, or where significant problems arise from the impact of multiple development sites and therefore not the responsibility of any individual development to resolve.

1.3 The approach and the TRICS guidance

1.3.1 The approach to undertaking TAs and TSs that OCC requires developers to follow is based on guidance that TRICS (2021) has produced, called the 'Guidance Note on the Practical Implementation of The Decide & Provide Approach'. OCC's document builds on the TRICS advice adding further detail where necessary and ensuring that it relates appropriately to the LTCP and Oxfordshire.

1.3.2 The approach must be informed by a vision, which sets out how people and goods will travel to and from (and within) a development site. This vision must show how it aligns with the countywide vision outlined in the LTCP and any other relevant vision, such as those set out in a Local Plan (or Neighbourhood Plan, if applicable). The vision may also need to take account of local needs, issues, and opportunities, see paragraph 117 of the NPPF for a list of some of the elements that should be considered. The TA or TS must then articulate in detail, with suitably robust evidence, how that vision is to be achieved.

1.3.3 Essentially, this approach still entails the need for proposed developments to assess their potential transport impact on the highway network, but instead of basing this

solely on previous travel patterns as before, TAs will be required to model a range of plausible scenarios (or 'reasonable scenarios' per paragraph 116 in the NPPF). As such transport modelling will still be necessary. However, only once trips have been attributed to active travel and public transport modes (in line with the vision), supported by appropriate and agreed justification, should it be assumed that the remainder of trips will be made by the private car.

1.3.4 These scenarios will be based on the characteristics of the proposed development's location, its existing accessibility, the connectivity improvements that will be either delivered directly by the site developers or through financial contributions towards OCC schemes, and the extrapolation of trends in travel behaviour. The document also sets out how, through S106 legal agreements and travel plans, the impacts of developments will need to be monitored and managed over time.

1.3.5 Further to this, rather than identifying junctions that are forecast to be over capacity and then providing schemes to increase capacity for private vehicles, developers will instead be expected to first consider the extent to which they could address these issues by making provision for sustainable and active modes. These provisions should be of a sufficiently high quality to achieve the requisite modal shift to address the identified capacity issues. It should also be ensured that the provisions comply with policies requiring the promotion of sustainable and active modes, including due consideration of the transport user hierarchy identified in Policy 1 of the LTCP (see further discussion of policy in sections 1.5-1.7).

1.3.6 Additionally, as before, in many cases development proposals will still be expected to make contributions towards strategic improvements to be delivered by OCC in addition to direct delivery of schemes by site developers as appropriate.

1.3.7 Whilst planning obligations will still be required to meet the tests set out in paragraph 58, p.16 of the National Planning Policy Framework (NPPF) and Regulation 122(2) of the Community Infrastructure Levy Regulations 2010, it is essential to note that following the requirements of this document will not afford developers an opportunity to reduce expenditure on appropriately justified infrastructure requirements or other planning obligations, such as contributions to public transport service enhancements or 'soft' measures such as car clubs, etc. As the TRICS guidance notes (2021a, paragraph 7.17, p.22):

> It is important to state that the use of scenarios should not be carried out as a mechanism to minimise investment in the transport infrastructure. Using D&P [decide and provide] does not reduce the overall investment, rather it redistributes it to other travel modes.

1.4 The role of this document as part of other planning processes

1.4.1 It is important to note that individual sites will make a valuable contribution to decarbonising the transport network and are required to have demonstrated that they have mitigated their transport impact through policy-compliant means. However, decarbonising the transport network will not be most effectively achieved by only addressing transport needs on a site-by-site basis. Referring back to the necessarily multi-pronged approach to reshaping the transport network, this document, and the practices it requires are embedded in TAs and TSs, will form only one part of the means necessary to achieving the key aims of the LTCP.

1.4.2 Of fundamental importance will be ensuring that, through the forthcoming Local Plans for each of the district and city councils, development is allocated in locations (in

line with paragraph 110 of the NPPF) where there are the best opportunities for reducing the need to travel by co-locating residential and employment uses, or where exists the best opportunities for providing high-quality active and sustainable transport infrastructure and service improvements.

1.4.3 These opportunities will need to be thoroughly explored and identified through the associated plan-making processes, as well as in more detail at the planning application stage. It is also important to acknowledge that this document and its requirements apply equally to allocated and non-allocated development sites.

1.4.4 Further to this, it will be important to ensure that these practices promoted by OCC – including the forthcoming LTCP corridor and movement and place strategies (and any resultant strategic schemes identified by OCC), the Implementing Decide & Provide document, and the new Parking Standards for New Developments document – are appropriately referenced within the core policies of the forthcoming Local Plans, as Local Plans carry greater weight in planning decisions than the LTCP does by itself.

1.5 The NPPF and the DfT's Decarbonising Transport plan

1.5.1 Provided below is a summary of the relevant national policy that lends weight to moving towards the 'decide and provide' approach and that supports ensuring that high-quality walking, wheeling, cycling, and public transport provision accompanies new development. Section nine of the NPPF (2024) discusses the promotion of sustainable transport, thus setting the context for the aims of this document. Paragraph 109 (p.31) states that:

> Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve:
>
> a) making transport considerations an important part of early engagement with local communities;
>
> b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places;
>
> c) understanding and addressing the potential impacts of development on transport networks;
>
> d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated;
>
> e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and
>
> f) identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains.

1.5.2 Additionally, paragraphs 115 to 118 (p.33) stipulate how development proposals should be considered. Notably, paragraph 115 states:

> In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:
>
> a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;
>
> b) safe and suitable access to the site can be achieved for all users;

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach.

1.5.3 This is followed by paragraph 116, which states:

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.

1.5.4 Therefore, if a proposed development has not provided for safe and suitable connections to the site for walking, wheeling, and cycling, this should be considered an unacceptable impact on highway safety and thus a reason for refusal on highway grounds, when considered in the context of both paragraph 115 and paragraph 116. Furthermore, it should be noted that paragraph 115 (d) states that it should be ensured that 'significant' impacts (rather than 'severe') on the transport network are to be mitigated through a vision-led approach.

1.5.5 Therefore, if 'severe' impacts in terms of capacity and congestion on the network are not shown through any modelling exercise, that does not remove the need to ensure that suitable walking, wheeling, cycling, and public transport provision is delivered.

1.5.6 NPPF Section 14 on 'Meeting the challenge of climate change, flooding and coastal change' also asserts that, "The planning system should support the transition to net zero by 2050…" (paragraph 161) and that new development should be planned for in ways that, "…help to reduce greenhouse gas emissions, such as through its location, orientation and design." (paragraph 164b). This is particularly pertinent to the aims of Implementing Decide & Provide given that domestic transport was the largest emitting sector in the UK in 2023, responsible for 29% of all emissions (Department for Energy Security and Net Zero, 2025).

1.5.7 Finally, the Department for Transport (DfT) has produced a plan which sets out the government's commitments and the actions needed to decarbonise the entire transport system in the UK, this is called, 'Decarbonising transport: a better, greener Britain' (DfT, 2021a), and states (p.158):

We recognise that the government has a role in helping Local Planning and Highways Authorities to better plan for sustainable transport and develop innovative policies to reduce car dependency. We need to move away from transport planning based on predicting future demand to provide capacity ('predict and provide') to planning that sets an outcome communities want to achieve and provides the transport solutions to deliver those outcomes (sometimes referred to as 'vision and validate'). We will continue to work with MHCLG to identify how we can best support local authorities to develop innovative sustainable transport policies as part of the planning process, how this can be used to better assess planning applications, and better monitor local transport outcomes to deliver on our ambitions for sustainable transport use.

1.6 The vision-led approach

1.6.1 Since OCC's Implementing Decide & Provide document was first published in September 2022 there have been three iterations of the NPPF. Significantly, the latest version published in December 2024, as referenced in the previous section, includes the

new requirement for development plans and development proposals to follow a vision-led approach to transport planning. This is referenced in the aforementioned paragraphs 109 and 115 and in paragraph 118 (p.33), which states:

> All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored.

1.6.2 Further to this, the glossary at Annex 2 (p.80) describes a vision-led approach as:

> …an approach to transport planning based on setting outcomes for a development based on achieving well-designed, sustainable and popular places, and providing the transport solutions to deliver those outcomes as opposed to predicting future demand to provide capacity (often referred to as 'predict and provide').

1.6.3 When these changes to the NPPF were initially proposed it was stated in the supporting text for the accompanying consultation that (Chapter 8, paragraph 7, MHCLG), "To support the implementation of this updated policy, we will publish updated guidance alongside the policy coming into effect." At the time of publication, this updated guidance remains forthcoming.

1.6.4 Thus, in the context of this description of the vision-led approach and in lieu of the updated guidance, the Implementing Decide & Provide document should be seen as the methodology that development proposals within Oxfordshire must follow in order to meet the requirement set out in paragraph 118 of the NPPF. However, it is expected that, once the updated guidance is made available, OCC's Implementing Decide & Provide will be complementary to the national guidance and will remain necessary in setting out local requirements to ensure that a vision-led approach to transport planning has been followed.

1.7 Local Plan policies

1.7.1 Provided below is a summary of the relevant local policy that lends weight to moving towards the 'decide and provide' approach and that seeks to ensure that high-quality walking, wheeling, cycling, and public transport provision accompanies new development. The four district councils and the city council all have overarching policies in their respective Local Plans (further supported by more specific policies for individual site allocations) strongly supporting the promotion of sustainable and active transport modes and seeking to reduce the need to travel, key extracts from these policies are listed below.

1.7.2 Cherwell Local Plan 2011-2031: Part One, Policy SLE 4: Improved Transport and Connections (p.55):

> All development where reasonable to do so, should facilitate the use of sustainable modes of transport to make the fullest possible use of public transport, walking and cycling. Encouragement will be given to solutions which support reductions in greenhouse gas emissions and reduce congestion.

1.7.3 Oxford Local Plan 2036, Policy M1: Prioritising walking, cycling, and public transport (pp.104-106):

> Planning permission will only be granted for development that minimises the need to travel and is laid out and designed in a way that prioritises access by walking, cycling and public transport.

1.7.4 South Oxfordshire Local Plan 2011-2035, Policy TRANS2: Promoting Sustainable Transport and Accessibility (pp.149-150):

The Council will work with Oxfordshire County Council and others to:...

iii) ensure new development is designed to encourage walking and cycling, not only within the development, but also to nearby facilities, employment and public transport hubs;

iv) support provision of measures which improve public transport (including Park & Ride), cycling and walking networks within and between towns and villages in the district;

and Policy TRANS4: Transport Assessments, Transport Statements and Travel Plans (p.153):

Proposals for new developments which have significant transport implications that either arise from the development proposed or cumulatively with other proposals will need to submit a Transport Assessment or a Transport Statement, and where relevant a Travel Plan. These documents will need to take into account Oxfordshire County Council guidance and Planning Practice Guidance and where appropriate, the scope should be agreed with Highways England.

1.7.5 Vale of White Horse Local Plan 2031: Part One, Core Policy 33: Promoting Sustainable Transport and Accessibility (p.124):

The Council will work with Oxfordshire County Council and others to:…

ii. ensure that developments are designed in a way to promote sustainable transport access both within new sites, and linking with surrounding facilities and employment

and Core Policy 35: Promoting Public Transport, Cycling and Walking (p.126):

iii. ensure that new development is designed to encourage walking as the preferred means of transport, not only within the development, but also to nearby facilities and transport hubs

1.7.6 Vale of White Horse Local Plan 2031: Part Two, Development Policy 16: Access (p.91):

ii. acceptable off-site improvements to the highway infrastructure (including traffic management measures), cycleways, public rights of way and the public transport network can be secured where these are not adequate to service the development.

1.7.7 West Oxfordshire Local Plan 2031, Policy T1: Sustainable transport (p.90):

Priority will be given to locating new development in areas with convenient access to a good range of services and facilities and where the need to travel by private car can be minimised, due to opportunities for walking, cycling and the use of public transport, particularly where this would help to reduce traffic congestion on the routes around Oxford and the Air Quality Management Areas at Witney and Chipping Norton.

and Policy T3: Public transport, walking and cycling (p.101):

All new development will be located and designed to maximise opportunities for walking, cycling and the use of public transport.

1.7.8 Further to this, the emerging Local Plans all make specific reference to decide and provide or vision-led planning thus lending further support for the aims of this document as listed below. All of the emerging Local Plans also acknowledge the climate emergency and the importance of addressing climate change.

1.7.9 Cherwell Local Plan Review 2042 (Regulation 19 version, Dec 2024), Policy CSD 22: Sustainable Transport and Connectivity Improvements (p.76) requires development proposals and infrastructure provision to reflect OCC's transport user hierarchy and that:

> All development should take a 'decide and provide' approach to manage travel demand by reducing the need to travel, planning for sustainable travel modes, and providing for zero emission vehicle use.

and Policy CSD 23: Assessing Transport Impact / Decide and Provide (p.78):

> The Plan supports Oxfordshire's Local Transport and Connectivity Plan 'decide and provide' approach to help the delivery of public transport and active travel improvements as well as to manage the County's road network in a manner which improves safety as well as reduces traffic and congestion.
>
> These developments will be required to submit a Transport Assessment or a Transport Statement and where relevant a Travel Plan. Transport Assessments should follow latest guidance from Oxfordshire County Council and be supported by a 'worst case' traffic impact scenario that includes all development in this Local Plan.

1.7.10 Oxford Local Plan 2042 (Regulation 18 version, Jun 2025) notes in the supporting text for Draft Policy C6: Transport Assessments, Travel Plans and Service and Delivery Plans (p.161) that:

> The requirements for the transport assessment and travel plans are set out in Oxfordshire County Council's document Implementing Decide and Provide in Transport Assessments.

1.7.11 South Oxfordshire and Vale of White Horse Joint Local Plan 2041 (Regulation 19 version, Oct 2024), Policy IN2 – Sustainable transport and accessibility (pp.356-358):

> 2) All major development proposals must demonstrate that:
>
> g) the methodology in Oxfordshire County Council's Implementing Decide and Provide: Requirements for Transport Assessments document has been used to assess the need for infrastructure and provision of transport services;

1.7.12 West Oxfordshire Local Plan 2041 (Regulation 18 version, Jun 2025), CP10 – Sustainable Transport (p.50):

> All developments generating significant movement must be accompanied by a travel plan and a vision-led transport statement or transport assessment.
>
> Transport considerations must be an integral part of early community engagement and master planning.
>
> Development proposals must demonstrate how they minimise the need to travel and offer a genuine choice of transport modes including the integration of multi-modes of travel.

PART TWO | Evidencing Trip Rates, Local Plan Modelling, Document Updates

This part of the document sets out the suitability of various evidentiary sources; the consideration of the long-term effects of Covid-related transport impacts; the relationship between car parking provision and trip rates; the applicability of the car trip reduction targets in the LTCP; how this document should inform the evidence base for Local Plans; and the requirement for periodic updates to the document.

2.1 Sources of evidence for justifying multi-modal trip rates

2.1.1 As importantly noted in the TRICS guidance (2021a, p.24):

> A clear evidence-based approach to D&P should be taken and reported upon in the TA (or TS) accordingly. A robust evidentiary base, transparently and accurately sourced, remains as important as ever. Up-to-date and relevant evidence should be cited wherever possible.

2.1.2 While it is suggested that the starting point for determining existing and forecast multi-modal trip rates for all scenarios is to use the TRICS database, other sources of supplementary or alternative evidence may also be acceptable as long as their use is explained and justified.

2.1.3 One such potential source may be to utilise travel to work data from the ONS census in 2011. Census data from 2021 is not suitable as it was undertaken in the midst of the Covid pandemic so is not representative of typical travel patterns due to a number of influencing factors, as detailed by the Office for National Statistics (ONS, 2022). How TRICS and census data can be utilised is discussed in more detail in Part Three (pp.14-30).

2.1.4 Other potential sources may include existing survey data from other sites, survey data from the current site (if an extension is being proposed), survey data of other locations commissioned by the applicants of the proposed development, or empirical studies from academic sources as long as they are from an appropriate timescale (typically no older than 5 years unless justified) and are sufficiently comparable in respect of location, proximity to key services, connectivity characteristics (i.e. walking, wheeling, cycling, and public transport provision), and other significant variables.

2.1.5 If no existing evidence can be found as a means to support the adjustment of multi-modal trip rates, then taking a 'first principles' approach to determining trip rates should be considered. For example, if the frequency of a bus service is due to be enhanced through pump-priming from a financial contribution in the S106, the anticipated effect of this measure could be derived from information from the relevant bus operator based on patronage data trends from similar, historic examples of other service enhancements.

2.1.6 The use of all evidentiary sources will need to be appropriately justified and their acceptability must be agreed with OCC transport officers. Where relevant, evidentiary sources will also need to be agreed with National Highways.

2.2 Data from the National Travel Survey

2.2.1 Multi-modal trip rate data forecasts from the DfT National Travel Survey (NTS) are generic and should only be considered once the exploration of other sources (including the collection of new data) has been exhausted. Typically, referencing national trends

should be avoided as these are not directly relevant to any specific location. The NTS acknowledges the limitations of its findings in its Quality Report (DfT, 2025), stating:

> The NTS is not designed to produce robust data below regional level. Whilst it is possible to analyse data for smaller geographies than regions, for example local authorities, often many years of data need to be combined to obtain a suitable sample size. This approach is not ideal as weightings are applied to the sample to be representative of England in a single year. This is likely to skew analyses as demographics at sub-national level can vary significantly from the national level.

2.2.2 Furthermore, while the NTS identifies a trend in the reduction of annual trips since 2019 prior to the Covid-19 pandemic (DfT, 2024, p.1) at the national level, analysis of ONS census data from 2001 and 2011 (Marsden, 2018) shows that the reduction has fallen more sharply in urban areas than in rural areas. Additionally, while the commuting mode share for private cars in London and regional centres has decreased over the same period, the mode share for private cars has instead increased in smaller towns and rural areas.

2.3 Accounting for Covid-related transport impacts

2.3.1 As noted in the LTCP (2024, p.12), the long-term effects on travel behaviour resulting from the Covid-19 pandemic are still not yet known. While there has been some shift towards more homeworking for office-based jobs, it remains too early to make any meaningful or quantifiable judgements about how shifts in travel behaviour are likely to be impacted in the mid to long-term.

2.3.2 Indeed, as of December 2025, traffic count data recorded across Oxfordshire by OCC shows that there is an uneven impact on peak time traffic levels, five-day average flows, and average annual daily traffic flows, with some areas seeing a return to pre-pandemic levels, while other locations are above or below pre-pandemic levels.

2.3.3 Accordingly, it may only be appropriate to include any predictions about Covid-related impacts on mode share or trip generation in future year scenarios as sensitivity tests at this juncture. However, should new travel patterns begin to emerge over the course of the coming years and there is suitable supporting data to evidence these new behaviours, these could be considered in TAs in the mid to long-term as a separate scenario to be tested alongside other scenarios. Any suppositions made would also need to be carefully monitored to record whether these in fact materialise.

2.3.4 Collecting this data through monitoring will make an important contribution to understanding these emerging travel behaviour patterns, as recognised by the International Transport Forum in their Travel Transitions research report (2021).

2.4 Car parking provision and trip rates

2.4.1 Parking provision must be proposed in line with OCC's Parking Standards for New Developments (2022) or any subsequent updates to the standards. Studies have shown that the availability and convenience of car parking can have an effect on car usage, both at journey origin from residential developments (Transport for London, 2012 and Guo, 2013) and, in the context of commuting, at journey destination (Dalton, *et al*, 2013 and Christiansen, *et al*, 2017), with parking costs also an important factor.

2.4.2 However, these studies also show that there are a number of other factors that also influence car use, including public transport availability and travel time or distance to work. Accordingly, when setting trip rate assumptions in TAs and TSs, the proposed car parking

provision (including for car clubs) should be considered as a potential means of influencing the reduction of anticipated car trips (particularly for employment and other developments which tend to be trip destinations). However, it is important that this forms part of a coordinated and holistic approach supported by other measures to facilitate walking, wheeling, cycling, and public transport use.

2.4.3 Providing car parking in line with the latest OCC standards (alongside cycle parking) will need to form part of a wider strategy to encourage modal shift by also providing improvements to sustainable and active modes, demand management measures, and master planning (in accordance with OCC's Street Design Guide, 2024).

2.5 Use of LTCP car trip reduction targets

2.5.1 The LTCP, as updated in November 2024, includes the following targets for replacing or removing car trips across the County (2024, p.6):

By 2030 our targets are to:

- Replace or remove 1 out of every 4 current car trips in Oxfordshire
- Reduce car vehicle miles driven in Oxfordshire by 20%
- Increase the number of cycle trips from 600,000 to 1 million cycle trips per week
- Reduce road fatalities or serious injuries by 50%

By 2040 our targets are to:

- Deliver a net-zero transport network
- Replace or remove an additional 1 out of 3 car trips in Oxfordshire

By 2050 our targets are to:

- Have zero, or as close as possible, road fatalities or serious injuries
- Deliver a transport network that contributes to a climate positive future

2.5.2 At the time of writing, the means of achieving these targets are in the process of being comprehensively identified. The forthcoming movement and place strategies and corridor movement and place strategies, OCC's new Parking Standards for New Developments (2022) document and the Street Design Guide (2024) will all make important contributions towards meeting these targets, as will the emerging Local Plans, and individual development sites.

2.5.3 Therefore, it may be challenging to substantiate how these targets will be achieved to a sufficient degree of certainty for the purposes of modelling a core scenario. However, with respect to traffic generated by a development site or background and committed growth, it may be appropriate for TAs to include additional sensitivity scenarios with these target reductions as a basis for trip rate assumptions. For further discussion of how uncertainty should inform the choice of core and alternative scenarios, see paragraphs 1.3 and 3.50 of the DfT's Uncertainty Toolkit (2021b) and sections 3 to 5 of the DfT's TAG Unit M4: Forecasting and Uncertainty (2019).

2.6 Vision-led transport planning for Local Plans

2.6.1 Transport evidence bases for Local Plan development should also adopt a similar methodology as required for TAs for individual developments, and thus also be carried out in accordance with paragraphs 109 and 115 of the NPPF in order to adopt a vision-led approach to plan-making. Local Plans should consider a range of plausible scenarios, which incorporate different assumptions about trip generation. Given the challenges associated with transport modelling at this geographic scale, how the range of scenarios will be assessed in modelling terms will need to be carefully considered, and other

quantitative and qualitative approaches may be necessary depending on the modelling tools available.

2.6.2 In this way, the plan-making process (as described in section 1.4) can anticipate potential issues with various spatial strategies that may be under consideration. It will enable the more successful identification of opportunities to ensure suitably high-quality sustainable and active mode connectivity, and opportunities to reduce the need to travel.

2.6.3 Accordingly, as with the process for identifying impacts at the planning application stage, the transport evidence for plan-making should also consider multiple plausible scenarios for trip generation (see Stage 2: Scenario testing, pp.15-17) associated with the spatial strategy identified in the Local Plan. This will help to ensure that connectivity for sustainable and active modes can be provided for sufficiently; and instances where failing to do so results in locations on the highway network that are over capacity are understood.

2.7 Future updates to this document

2.7.1 In order to keep aligned to changes in local and national policy and legislation, this document will be periodically reviewed and updated. This version of the document represents the first iteration of those updates and replaces the version published in 2022.

2.7.2 It is recognised that the approach in this document represents a significant change in how TAs were undertaken prior to the publication of its original version in 2022, how the resultant connectivity improvements are identified, and how impacts are monitored over time. As the TRICS guidance acknowledges (para 11.7, p.29):

> As transport professionals, we are directly experiencing the paradigm shift to a new D&P approach. It can be uncomfortable moving on from familiar and ingrained ways of working and we can only learn by doing.

2.7.3 Considering this represents a different way of working it is also possible that changes will need to be made to refine how the document works in practice. It is anticipated that a review of the OCC document will take place every 12-18 months, in line with the timescales identified in the TRICS guidance (paragraph 1.8, p.8).

PART THREE | Embedding 'Decide and Provide' in Transport Assessments

This third and final part of the document details the process for implementing the 'decide and provide' approach through the TA or TS accompanying a planning application. This is set out in three main stages: creating the vision, scenario scoping, and understanding accessibility characteristics; scenario testing and identifying connectivity improvements; and monitoring and managing outcomes.

The three main stages are broken down into sixteen steps supported by additional text, setting out the rationale and context. A flow-diagram summarising the three stages of the process is provided at Appendix 1. A worked example for a residential development proposal is provided at Appendix 2. A methodology checklist is also included at Appendix 3, this must be completed and submitted alongside any TA or TS.

In order to adequately demonstrate that a vision-led approach has been taken it is very important that the process described below is undertaken thoroughly, all parameters are appropriately scoped and agreed with OCC, all assumptions are robustly evidenced, and that this is comprehensively and clearly reported in the resulting TA or TS. To this end, it is strongly recommended that pre-application highways advice is sought early in the application process to determine and agree the appropriate parameters (per OCC's Pre-application highways advice, 2022).

A contents page for this final part of the document is provided below to assist in navigating the sixteen steps that constitute the three stages of the Implementing Decide and Provide process.

3.1 Stage 1: Creating the vision, scenario scoping, understanding accessibility

3.1.1 The TRICS guidance advises that a visioning exercise should be undertaken to identify what kind of place is intended to be made through the proposed development. It states that three key questions should be answered (paragraph 6.5, p.17):

- What sort of place are we creating?
- What kind of activities do we need or desire to travel for?
- How will we provide for mobility?

3.1.2 These are very important questions to consider as part of master-planning and will help to identify and inform key elements of a proposed development such as its mix of uses and their relative locations to ensure that the optimal connectivity and internalisation is achieved in accordance with the LTCP's transport user hierarchy and its aim to reduce the need to travel. In accordance with the NPPF (2024), transport issues associated with development proposals need to be informed by a vision. For the purposes of informing TAs and TSs, this vision needs to be translated into suitably defined elements, which in turn can inform the necessary provision of on and off-site provision for all modes, parking levels, and public transport improvements.

3.1.3 The transport vision needs to stem from a more holistic vision for the development proposal overall. In this way, transport planning is not considered as a separate matter to spatial planning, rather accessibility and movement are integral to land use. The overall vision should be clearly set out, which then shapes the master planning process.

3.1.4 This document considers accessibility as a combination of the influences of proximity and connectivity (both physical and digital). Identifying the characteristics of a site inherent to its location, such as its proximity to key places and services, whether schools, workplaces, retail, leisure or healthcare are to be provided within the development, and those characteristics that can be changed through connectivity improvements, is fundamental to establish anticipated trip rates for the various scenarios to be tested by identifying comparable sites in the TRICS database (or derived from other sources of evidence).

Step 1: Creating the vision

A transport vision for the development proposal needs to be created, which sets out the following:

- How the transport vision has been informed by the overall vision for the proposed development;
- How people and goods will travel to and from (and within) the site;
- How the vision aligns with the principles set out in Section 9 of the NPPF on 'Promoting sustainable transport' (paragraphs 109-118);
- How the vision aligns with the countywide vision outlined in the LTCP;
- How the vision aligns with any other relevant vision, including the Local Plan (and Neighbourhood Plan, if applicable);
- The vision may also need to take account of local needs, issues, and opportunities. Engagement with relevant people and organisations may be necessary to understand these local matters; and
- The TA or TS must then articulate in detail, with suitably robust evidence, how that vision is to be achieved. This must include what provisions, on and off-site, will be necessary to realise this vision. These provisions will need to be articulated through the submission of masterplans, design codes, and off-site connectivity strategies (with accompanying scheme drawings) as appropriate.

3.2 Scenario scoping

3.2.1 In many cases it is likely that there will be a need to model between three and five scenarios, but this will depend on the scale, sensitivity, and complexity of a site and its location, as explained below. These scenarios may need to incorporate different trip rate assumptions accounting for the development proposal, connectivity improvements, and extrapolated trends in trip rates for the site and background growth assumptions. These are explored in detail in this following section and are summarised as follows:

1. **Reference cases (see steps 2-4):** These scenarios (for the baseline year and identified future years) are essential to establish the baseline or 'without development' conditions of the transport network. Appropriate scenarios will need to be identified to reflect different trip generation assumptions for permitted, committed, and planned growth.
2. **Do-minimum (see steps 5-8):** This should use trip rates derived from the TRICS database (or other evidentiary sources) based on comparable sites that reflect the proposed development's proximity to key services and its current connectivity provision (i.e. without proposed improvements).
3. **With connectivity improvements (see steps 9-11):** Once proposed connectivity improvements are identified, a second set of comparable sites from TRICS (or derived from other sources) is identified that resemble more closely the accessibility characteristics of the proposed development when taking into account the associated proposed improvements.
4. **Requirement and sequencing of further improvements (see Step 12):** Should the proposed improvements modelled in the previous scenario prove to be inadequate to address the impacts of the development proposal, further improvements will need to be identified and modelled. This scenario may also be

needed to identify the sequencing of and triggers for those further improvements, particularly for sites with a protracted build-out programme.

5. **Extrapolated trends (see Step 13):** Trend data from TRICS may be used to extrapolate potential future behaviours that may result in vehicular trip rates changing over time, in order to accommodate the uncertainty of future travel patterns. Any identified future trend-based change in vehicular trips should be applied to the site, and the background growth assumptions, as appropriate.

3.2.2 For many development proposals modelling three scenarios will be required, i.e. the 'reference case', the 'do-minimum', and the 'with connectivity improvements' (see paragraph 3.2.5 and Table 1 for more on this). Beyond this, the need to model further scenarios should be carefully considered to ensure that it is understood how the outputs will inform decision-making. In some cases, it may be appropriate to consider some scenarios in a qualitative sense (i.e. considering potential implications with supporting narrative), without the need for additional modelling, or only in specific locations rather than across the whole study area.

3.2.3 A central tenet of the decide and provide approach is the consideration of multiple scenarios. The TRICS guidance, advises that (p.19):

> Scenario planning covers a broad range of approaches, but in the context of this guidance it refers to the development of a set of plausible and divergent scenarios of the future that help expose uncertainty and, in turn, allow the uncertainty to be accommodated within plan making.

3.2.4 It later goes on to explain that the extent of scenario planning should be considered on a case-by-case basis with three main parameters to be considered to inform its requirement, these are (paragraph 9.5, p.25):

- **Scale** – The need for scenario planning will increase with the project size. All major planning applications relating to 500+ homes or 5,000m2 employment/retail floorspace should be supported by scenario planning.
- **Sensitivity** – The need for scenario planning will also increase with increased project sensitivity, for example in less accessible rural areas or, conversely, highly congested, dense urban environments.
- **Complexity** – The need for scenario planning will also increase with project complexity.

3.2.5 Table 1 below sets out which of the sixteen steps may be required to be followed depending on the scale of development. The sensitivity of the site's location also needs to be considered, as does the complexity of the proposed development as agreed with OCC officers. The need for some steps will be conditional on the outcome of the required steps. This is intended as a guide only.

Table 1: Steps required depending on development scale

Tier	Typical Size (no. dwellings or floorspace)	Required Steps	Potential Steps (conditional on outcome of required steps)
1	1-79 dwellings or up to 999 m²	1. Creating the vision 2. Scoping scenarios for modelling 5a or 5b. Assessing proximity characteristics 6. Assessing connectivity characteristics 9. Identifying connectivity improvements (*NB. this step may not require modelling in this tier, but the requirement for these improvements still needs to be identified, and their deliverability demonstrated*)	3, 4, 5c, 7, 8,10-16
2	80 dwellings upwards or 1,000 m² upwards	1. Creating the vision 2. Scoping scenarios for modelling 3. Establishing committed and planned growth assumptions 4. Reference case modelling 5a or 5b. Assessing proximity characteristics 5c. Mixed-use development: internalisation and localisation 6. Assessing connectivity characteristics 7. Comparison sites in TRICS and using alternative evidence 8. Modelling the do-minimum scenario 9. Identifying connectivity improvements 10. Evidencing new trip rates 11. Modelling the with connectivity improvements scenario 14. Scoping the Monitoring and Evaluation Plan 15. Determining triggers through monitoring 16. Implementing the Monitoring and Evaluation Plan	12. Determining the requirement for further improvements 13. Considering sensitivity scenarios and extrapolating trends

Step 2: Scoping scenarios for modelling

The three parameters of scale, sensitivity (including locations of existing safety concern or where the proposals give rise to safety concerns), and complexity should be applied to the consideration of whether a development proposal requires multiple scenarios to be modelled, referring to Table 1. It is likely that many sites that would not meet the criteria for scale would still be required to test multiple scenarios due to their sensitive locations. It is strongly recommended that pre-application highways advice is sought early on in the process to agree modelling requirements.

Whilst the requirement for modelling multiple scenarios based on different multi-modal trip rates may be less likely for smaller sites and minor applications, the principles of reducing dependence on the private car and providing for sustainable and active modes are applicable in all contexts. As noted in the TRICS guidance (2021a, p.25), 'As an approach, a way of thinking or mindset, D&P is relevant to all scales of development and its application can be tailored accordingly.'

For all scales of development, if a proposed development is delivering (or contributing towards) any kind of improvements to active and sustainable modes and is intending to base a reduction in vehicular trip rates in a TA or TS on that basis or intending to justify a reduction in vehicular trip rates for any other reason, then at least two modal share assumption scenarios will be required to be modelled.

However, if a development is not able to justify lower trips through the aforementioned means, it is less likely that there will be a requirement for additional scenarios to be tested. This would raise other concerns though, as it would suggest that the development proposal was insufficiently providing for sustainable and active modes, thus potentially suggesting that it is not policy compliant and that it is not a sustainable location for development.

As explained in Section 1.6, development proposals within Oxfordshire must follow the Implementing Decide & Provide document in order to meet the requirement to follow a vision-led approach to transport planning (as set out in paragraph 118 of the NPPF). As such, all TAs and TSs must include written commentary on how Implementing Decide & Provide has been followed with justification and rationale provided to explain any parts of the methodology that have been omitted (with reference to Table 1). To supplement this, the methodology checklist at Appendix 3 must be completed and appended to the TA or TS.

Where development has the potential to impact upon the A34 trunk road, M40 motorway, or their associated junctions, developers will need to agree the type of model to be used and the overall scope of the modelling with National Highways.

3.2.6 To ensure that the residual cumulative impacts on the transport network can be adequately identified and addressed (per NPPF paragraphs 116 and 118, p.33), the TA or TS must consider the appropriate inclusion of background growth. Pre-application discussions with OCC officers will provide an opportunity to establish an agreed mechanism for ascertaining this background growth.

Step 3: Establishing committed and planned growth assumptions

A scoping exercise will need to be undertaken to ensure that TAs and TSs take appropriate account of permitted, committed, and planned growth which will generate traffic impacts on the area of the highway network also impacted by the proposed development. All of these details must be reported in the TA or TS.

Amongst other matters, this will need to be considered in the context of whether it is intended for TEMPro (using DfT data to forecast the growth in trip origin-destinations over time) to be used and the appropriate inclusion of growth allocated in an emerging or adopted Local Plan.

As with proposed development itself, different scenarios accounting for permitted, committed, and planned growth may be required based on various plausible trip generation scenarios. This may include scenarios that assume that background growth will generate trips derived from current travel behaviours or that reductions in private car dependence will be achieved, which can be attributed to suitable rationale and evidence.

When considering the scenarios to be tested to account for background growth reference should be made as appropriate to the scenarios and assumptions identified in Table 1 (p.29, 2018) of the DfT's Road Traffic Forecasts 2018: Moving Britain Ahead.

Further to this, future year scenarios will need to be tested appropriate to the specific development proposal (taking into account its scale, build-out programme, etc.) and will need to be agreed with OCC transport officers. Where relevant, future year scenarios will also need to be agreed with National Highways.

Step 4: Reference case modelling

Once steps 1-3 have been completed, the reference case will need to be modelled to establish the baseline or 'without development' conditions of the transport network. The results of this modelling must be reported in the TA or TS.

3.3 Proximity and connectivity metrics for new developments

3.3.1 To identify multi-modal trip rates for the 'do-minimum' scenario for proposed residential development, an assessment is required of which services are accessible within a round trip of 20-minutes' walk (i.e. 10 minutes each way) based on walking routes and not as the crow flies. This assessment will also be required to determine whether the sites to be used as comparisons share similar proximity characteristics. A separate exercise will be needed to assess the proximity characteristics of proposed employment sites as set out in Step 5b.

3.3.2 The LTCP contains Policy 13 which considers liveable neighbourhoods and seeks to improve access to local facilities and services within a 20-minute return walk. The policy states that we will (2024, p60):

Work with our District and City Councils to ensure that regeneration schemes and new developments support application of the liveable neighbourhood model to create walkable, vibrant neighbourhoods.

This next step helps assess how well the proposed development meets this policy objective. For services more than 20 minutes return walk away, that means considering solutions for better cycling or public transport connections instead. The 20-minute walk assessment will not identify all possible walking, cycling or public transport solutions that may be required. Similar improvements could be needed for shorter or for longer journeys.

Step 5a: Residential sites – assessing proximity characteristics

In line with the LTCP (2024, see pp.55-61) and with the Town and Country Planning Association's (TCPA, 2021) guidance on 20-Minute Neighbourhoods, a 20-minute return walk should be based on an 800-metre walking distance, i.e. ten minutes there and ten minutes back. For the purposes of this document, this is taken to be within an 800-metre distance from the centre of the site. This must be based on available walking routes as opposed to a radius to better reflect actual, rather than theoretical, distances. The services to be identified as being within a 20-minute walk are:

- Primary school
- Secondary school
- Supermarket or local grocery shop (selling fresh food)
- Healthcare provision (e.g. GP surgery or pharmacy)
- Significant area of employment (such as a town centre, science park, business park, industrial estate, or other employment sites of a similar scale, e.g. major hospital, university, etc.)

If the provision of any of these five key services forms an intrinsic part of the proposed development, then the distance to these new locations can be used.

The acceptability of these five services should be agreed as part of the TA or TS scoping exercise with the details reported in the resultant document. For example, the schools identified should have sufficient capacity (or can be expanded) to accommodate new pupils.

3.3.3 The rationale for including these five services is based on the importance attributed to walkable access to education, healthcare, and jobs in the TCPA's guidance (see Section 2, pp.16-32).

3.3.4 Additionally, access to primary schools, supermarkets, and GP surgeries is identified in the Ministry for Housing, Communities, and Local Government's (MHCLG) English Indices of Deprivation 2019 Technical Report (p.51) as, "…important for people's day-to-day life and to which people need to have good geographical access". Proximity to these services is used as one of the indicators of deprivation.

3.3.5 Finally, the Department for Transport's National Travel Survey (DfT, 2024, p.1) identifies the three most common trip purposes in 2023 as being: shopping (18%); commuting (13%); and 'other including just walk' (9%), which lends further weight to the

identification of the proximity of the services listed above. Some geographical variations in trip purpose proportions may exist, but it is likely that these three trip purposes are generally common to all locations.

3.3.6 Not all development proposals will be within a 20-minute walk of all of these key services but identifying the distances to these destinations will provide a sufficient understanding of whether a site's proximity to these locations is of appropriate comparability with sites in the TRICS database. Some of this information may already be available in the Location Details of survey sites in the TRICS database.

Step 5b: Employment sites – assessing proximity characteristics

For the purposes of identifying multi-modal trip rates for the 'do-minimum' scenario for proposed employment developments, it will be necessary to identify existing employment sites of a similar scale to the proposed development and assess the proximity and scale of nearby settlements to establish the pool of potential employees for the site and the travel options available to them. The results must be reported in the TA or TS.

Step 5c: Mixed-use development – internalisation and localisation

Where a proposed development includes a mix of uses, the resultant internal and external trips will need to be identified and included in the modelling. These anticipated multi-modal trip rates must be appropriately evidenced, and consideration will also need to be given as to how these trips can be provided for in respect of sustainable and active mode provision and this must be reported in the TA or TS.

The internalisation and localisation rates may vary between different future year scenarios depending on the sequencing of facilities that are expected to influence these rates. For example, if there are future year scenarios to be modelled in 2025 and 2030 and a school is required to be provided on-site in 2028, its influence on internalisation and localisation rates should only be considered in the 2030 scenario.

As discussed in section 2.3, the mid to long-term effects on travel behaviour resulting from the ongoing Covid-19 pandemic are still not yet known. Shifts in travel behaviour remain in flux; such as increases in the prevalence of homeworking in some employment sectors. As such, it is challenging to make meaningful or quantifiable judgements about how vehicular trip rates are likely to be impacted in the mid to long-term. Accordingly, it may only be appropriate to include any predictions about Covid-related impacts on mode share or trip generation in future year scenarios as sensitivity tests at this juncture.

Step 6: Assessing connectivity characteristics

In addition to assessing the proximity of development proposals to the aforementioned locations in steps 5a and 5b, both proposed residential and employment developments should undertake an assessment to establish the relative quality of existing connectivity for walking, wheeling, and cycling, and detailed in the TA or TS. Additionally, a comparative assessment is required of the frequency of bus and rail services, the spread of service by time of day and days of the week, plus their respective journey times (i.e. directness of service), and the number of key destinations served.

This assessment must also take appropriate account of severance issues caused by railways, roads (particularly dual-carriageways and motorways), waterways, or any other obstacle that would impact on walking, wheeling, and cycling routes. It must also take account of the comparable quality of the provision for walking, wheeling, and cycling. For example: whether the routes have street lighting; controlled crossings; footways and cycleways of suitable widths, etc.

The quality of such provision will need to be assessed in terms of the extent to which it accords with any applicable standards, most notably Local Transport Note 1/20: Cycle Infrastructure Design (DfT, 2020). To this end, a walking, wheeling, and cycling audit should be scoped and agreed with OCC officers. Use of the Active Travel England's assessment toolkit may be appropriate

3.3.8 It is acknowledged that there are numerous factors that can influence the travel behaviour of residents and employees and therefore the accessibility characteristics identified above are an unavoidably imperfect means of determining the potential trip generation of a proposed development. Nevertheless, this remains an important exercise, especially in the context of considering a site's compliance with the LTCP Policy 13.

3.3.9 Completing steps 5 and 6 is necessary to demonstrate an understanding of the context of the proposed development, which will then help to inform the identification of connectivity improvements in Step 9 (see also the supporting text at 3.4.2-3.4.5).

Step 7: Comparison sites in TRICS and using alternative evidence

The comparable sites used in the TRICS database should be identified by following the general principles set out in the TRICS Good Practice Guide (2025, see Section 5, pp.10-13). However, to ensure a sufficiently robust process has been undertaken in determining this comparability, in addition to this, the same assessment exercise undertaken in either Step 5a or Step 5b and Step 6 must be applied to the sites to be used in TRICS.

When choosing suitable sites to be used as comparisons, it may be preferable (and more robust) to use the average trip generation of multiple sites that are broadly similar instead of using only one site that is more directly comparable.

Although it is recommended that the starting point for determining existing and forecast multi-modal trip rates for all scenarios is to use the TRICS database, other sources of supplementary or alternative evidence may also be acceptable. For further discussion of acceptable evidence, see sections 2.1 and 2.2.

As with identifying suitable comparison sites in TRICS, commentary in the TA or TS must be provided to demonstrate and justify that the data to be used is sufficiently comparable in respect of location, proximity to key services, connectivity characteristics (i.e. walking, wheeling, cycling, and public transport provision), and other significant variables.

3.3.10 When considering the suitability of evidentiary sources these must take account of whether the sample data has appropriately comparable characteristics in terms of the ONS Indices of Multiple Deprivation, car ownership levels, rates of employment, and bus and rail connectivity. Additionally, the data sample size should be of a sufficient scale in order that small numbers of those working in that area do not unduly skew the data.

3.3.11 Examples of uses that may result in both internalisation and localisation (i.e. trips attracted from outside the development in the case of the latter) include schools, employment, sports and leisure facilities, and local shops within residential sites. Within large employment sites, examples include sports and leisure facilities and local shops.

3.4 Stage 2: Scenario testing and identifying connectivity improvements

Step 8: Modelling the 'do-minimum' scenario

The 'do-minimum' will be based on multi-modal trip rates derived from the TRICS database using other comparable sites as set out in steps 5-8 or based on alternative (or supplementary) evidence. As outlined in Stage One, detailed justification must be provided as to why these comparison sites (or alternative evidence sources) are suitable and reflect as closely as possible the characteristics of the proposed development's location in its current state, i.e. without any of the proposed off-site improvements.

This justification must be reported in the TA or TS and will include details of the proximity and connectivity characteristics of the comparison sites. The importance of modelling this scenario is discussed in section 3.5.

3.4.1 The comparison sites selected (either from the TRICS database and/or from some other suitable source) should be of a similar proximity to the five services identified in stage one but also have provision of a similar quality in terms of walking, wheeling, and cycling connections and access to similar levels of bus services (and rail services if applicable) in terms of frequency, journey times (i.e. directness of service), and number of key destinations served. Considering proximity in isolation is insufficient as the propensity to walk and cycle will also be influenced by the quality and attractiveness of facilities. If available, using the DfT's Connectivity Tool to assess the comparability of sites could be considered.

Step 9: Identifying connectivity improvements

The 'with connectivity improvements' scenario will need to include the proposed off-site connectivity improvements and bus service enhancements, accompanied by supporting evidence of their deliverability and ongoing viability respectively. The deliverability of all off-site improvements must be adequately demonstrated (which will need land and highway boundary searches and road safety assessments, and may include topographical surveys, ecological surveys, and utilities surveys) as part of any planning application, as any such improvements will be material to the assessment of the acceptability of the development proposals.

This should also take account of active travel and public transport provision within the site and improvements to be delivered by others if a particular impact on site traffic or background growth is directly attributable to said scheme and if it has sufficient certainty of delivery (e.g. is fully funded and has planning permission).

The identification of connectivity improvements should reflect the transport user hierarchy referenced in LTCP policies 1 and 2 (pp.36-39) and consider the embodied carbon of infrastructure referenced in Policy 27 (pp.88-90) and potential futureproofing to ensure climate resilience. The resultant improvements identified for sustainable and active modes should always be delivered at an early stage of the build-out of a development to ensure that suitable travel choices are available and positive travel behaviours are embedded from the outset.

The connectivity provision to and from and within the site for all users must be set out, with reference to the assessment of accessibility characteristics undertaken in steps 5a, 5b, and 6. The adequacy of said provision must be assessed in the context of: LTCP paragraphs 1.5.1-1.5.3, the vision identified in Step 1, and any applicable standards, including Local Transport Note 1/20: Cycle Infrastructure Design (DfT, 2020).

These details must be reported in the TA or TS and must include commentary on how safe and suitable access for all users has been demonstrated (per paragraph 115 of the NPPF). In this context, the term 'all users' is taken to mean people: walking; wheeling; cycling; using public transport; and using motor vehicles.

In line with LTCP policies 24-26 and in support of the LTCP's aim of reducing the need to travel, consideration should also be given to digital connectivity by incorporating fibre broadband connectivity and 5G infrastructure into new developments.

The TA or TS must ensure that all appropriate opportunities for directly delivering, contributing towards, and/or providing connections to schemes and routes in the following documents have been identified (including but not limited to):

- The relevant Local Plan's Infrastructure Delivery Plan (IDP)
- Neighbourhood Development Plans (NDPs)
- Local Cycling and Walking Infrastructure Plans (LCWIPs)
- LTCP movement and place strategies (both area and corridor)
- OCC's Strategic Active Travel Network (SATN)
- Public Rights of Way (PRoW)

3.4.2 In addition to considering the need for connectivity improvements in the context of those matters identified in Step 9, it is important to think about the need – and thus how the three tests in paragraph 58 of the NPPF are met – for improvements beyond only those arising from the impact of private vehicles in the AM and PM peak hours. In doing so, it is important to recognise that many walking, wheeling, and cycling trips occur outside of the peak hours and provision needs to be made for these trips to ensure that safe and suitable access for all users has been achieved (per paragraph 115 of the NPPF).

3.4.3 To this end, undertaking the assessments in steps 5a, 5b, and 6 is particularly important so that the demand for walking, wheeling, and cycling trips for different purposes and to different destinations is better understood and that the impact of a development proposal is not understood only by narrowly looking at the distribution of motorised vehicles in the AM and PM peaks.

3.4.4 Furthermore, the notion of access should not be regarded as only referring to the access to the site, i.e. where the new site connects into the existing highway network. Rather, the term access should be considered as referring to the accessibility (i.e. proximity and quality of connectivity) of the locations (and elsewhere, if applicable) and characteristics identified in steps 5a, 5b, and 6.

3.4.5 It is also very important to ensure that the off-site provision for walking, wheeling, cycling, and public transport is supported by on-site provision that also prioritises these users within the site. This must be demonstrated through suitable street design, master planning (both in accordance with OCC's Street Design Guide), and parking provision, including high-quality, covered, and secure cycle parking (in accordance with OCC's Parking Standards for New Developments), to ensure alignment with section nine of the NPPF (2024) and OCC's LTCP transport user hierarchy.

Step 10: Evidencing new trip rates

A separate review of the TRICS database can then be undertaken, this time to consider comparison sites that now more closely reflect a similar level of provision for walking, wheeling, cycling, and bus service levels, when taking into account the proposed connectivity improvement package associated with the proposed development, whilst also remaining comparable in respect of proximity and connectivity as discussed in Stage One.

The multi-modal trip rates derived from this new set of comparison sites can then be used as a basis for modelling this subsequent scenario. If it is not possible to identify appropriately comparable sites in the TRICS database for the 'do-minimum' or 'with connectivity improvements' scenarios, then as discussed in Section 2.1, other sources of evidence could be considered instead.

It must be made clear how the identified trip rates have been informed by the evidence and, in turn, how the evidence is directly linked to the specific provisions proposed.

Step 11: Modelling the 'with connectivity improvements' scenario

The 'with connectivity improvements' scenario should include the anticipated effects of all elements of the development proposal, both on and off-site, and any associated improvements to public transport services, i.e. all elements that are identified as being required to realise the vision for the development proposal as a whole.

All sources of evidence used to support the identification of trip rates (for all modes) must be cited clearly and comprehensively in the TA or TS and it must be explained why the sources are considered to be relevant and applicable to the proposed development, including reference to the age of the data, similarities and differences in location, and proximity and connectivity characteristics. Once suitably evidenced, the 'with connectivity improvements' scenario should then be modelled.

3.4.6 Assuming that they can be demonstrated to have suitably comparable accessibility characteristics – using a similar methodology as described in section 3.2 – then the mode shares for travel to work data from the Lower Super Output Areas in the ONS 2011 census could be utilised. With appropriate justification, it could then be assumed that these mode shares apply to other trip purposes as well.

3.4.7 However, on the basis that TRICS covers the modal share of all trips generated by a site (regardless of purpose) and will likely be more up to date than the 2011 census, this should only be considered as a secondary option if it has already been established that there is no suitable data available from the TRICS database, other multimodal surveys of comparable sites, or other suitable alternative sources of evidence.

3.5 Further rationale for testing multiple scenarios

3.5.1 Assuming improvements to active and sustainable transport provision are being proposed as part of a new development, it is critical that at least these two scenarios ('do-minimum' and 'with connectivity improvements') are modelled, along with the Reference Case.

3.5.2 In any modelling exercise there is typically a reference case (i.e. without the development) and a 'do-minimum' in order to enable the identification of the potential impacts of a proposal (in this case a development) through comparing two scenarios and understanding the differences between them in trip generation patterns. This then aids understanding of the need for any subsequently proposed mitigation (in this case connectivity improvements) and then modelling their anticipated effect.

3.5.3 This is also necessary to inform whether any congestion issues arising from the development are satisfactorily addressed by the implementation of connectivity improvements or whether there remain residual impacts, the extent of said impacts, and therefore their acceptability. Without these reference case and 'do-minimum' scenarios, the potential impacts of development will not have been adequately assessed as required in NPPF paragraphs 109 (p.31), 116, and 118 (p.33).

3.5.4 For example, if congestion issues are identified, it is important that these do not have unacceptably detrimental impacts on the journey time reliability of bus services or adversely hinder the progress of walking, wheeling, and cycling. In such instances bus

priority measures or walking, wheeling, and cycling provision will be required to address these issues, where they are deliverable (see paragraphs 3.6.2 and 3.6.6 for more on this).

3.5.5 Furthermore, the modelling of multiple scenarios will form part of the evidence to justify the requirement for the connectivity improvements. By quantifying the potential modal shift achievable through the active and sustainable transport improvements and demonstrating their efficacy in addressing network capacity issues, their compliance with the three tests of the Community Infrastructure Levy Regulations (see paragraph 58 of the NPPF) will be demonstrated.

3.5.6 Additionally, testing multiple scenarios will illustrate what could happen if the connectivity improvement proposals do not achieve their desired effect, are later found to be undeliverable due to unforeseen issues, or are omitted from the subsequent S106 and S278 legal agreements, including addressing any potential safety implications. In this way, modelling these two scenarios reflects the need to accommodate uncertainty and various plausible outcomes, as is advocated in section seven of the TRICS guidance (see pp.19-23).

3.5.7 There may also be particular locations where a choice needs to be made between a capacity improvement or a sustainable and active mode improvement. In such instances, comparison with the reference case or 'do-minimum' scenario(s) will be necessary to properly inform this decision-making process (see further discussion of this issue in section 3.6).

3.5.8 Finally, the TRICS guidance advises practitioners (paragraph 7.19, p.22) to refer to the DfT's Uncertainty Toolkit to assist with identifying appropriate scenarios. In paragraph 3.31 (2021b, p.25) the toolkit states:

> Scenarios can contain both pessimistic and optimistic elements, but objectivity and a balanced approach should be maintained. Optimistic scenarios (or scenarios which are beneficial to the proposal under consideration) should not be considered in isolation.

3.6 Considering further scenario testing and capacity improvements

Step 12: Determining the requirement for further improvements

It may be necessary to model additional scenarios in cases where significant congestion issues remain on the network after the modal shift attributable to the connectivity improvements identified in the scenario in steps 9 and 10 has been considered. The matters covered in this step must be detailed in the TA or TS.

Capacity improvements for general traffic may be justified in situations where congestion results in detrimental impacts on bus journey time reliability – and therefore viable service operation and attractiveness to passengers – but where the frequency of service does not warrant bus priority measures; or where the availability of land renders bus lanes (or similar) undeliverable. The design of any capacity improvements for general traffic must always pay due consideration to the LTCP transport user hierarchy (Policy 1).

Other scenarios that may give rise to the consideration of capacity improvements include where congestion results in highway safety issues, air quality concerns, or the impedance to walking, wheeling, and cycling (where segregated provision is undeliverable). However, the appropriateness of any capacity improvements will need to be considered in the context of potential carbon impacts. Furthermore, it is important to reiterate that LTCP Policy 36 states that we will, "only consider road capacity schemes after all other options have been explored."

It is necessary for these scenarios to be given careful consideration so that any potential alternative mitigation can be identified at the planning stage and thus appropriately captured in the S106 and S278 legal agreements.

In some locations a choice may need to be made between either delivering a capacity improvement or a sustainable and active transport improvement. Assuming that choosing the improvement to sustainable and active modes does not potentially give rise to unacceptable impacts, there will be a presumption in favour of the improvement that best reflects the LTCP transport user hierarchy (Policy 1).

It will also be pertinent to consider the extent of potential congestion; if an improvement to walking, wheeling, and cycling has been facilitated by choosing not to deliver a capacity improvement and this results in queueing traffic for only short periods of the day but allows for an improvement for walking, wheeling, and cycling at all times, this should be considered in the decision-making process. In other cases, there may be off-site sustainable and active mode improvements to be delivered (or contributed towards) by a development that do not conflict with potential capacity improvements.

Following the outcomes of the site's monitoring (see Stage Three), if the anticipated mode shares are not achieved and car trips generated by the site are shown to be resulting in unacceptable impacts, it may be necessary for these identified capacity improvements to be delivered. However, it is important that such situations are given careful consideration: informed by suitable data; only considered once all sustainable and active mode improvements have been delivered; and that the requirement for the capacity improvement is considered as a 'last resort'. Where traffic generation is likely to impact on the strategic highway network, these matters will also need to be agreed with National Highways.

3.6.1 In some instances, it may be appropriate for the monetary equivalent of the capacity scheme to be provided as a contribution towards strategic (i.e. delivered by OCC) improvements instead of a capacity-led scheme being delivered directly by the developer.

3.6.2 Nevertheless, the acceptability of such instances will be carefully considered on a case-by-case basis, and in the context of network management matters and OCC's statutory duty under the Traffic Management Act (2004) to reduce and manage congestion.

3.6.3 In addition to the consideration of monitoring outputs in the context of connectivity improvements delivered by the development, other factors will also need to be taken into account. Where they provide new travel options for people accessing the development, these include matters such as the anticipated timing of the following:

- the introduction of new bus services (or improvements to existing services);
- the implementation of transport interventions delivered by OCC and;
- the build-out of other sites in the vicinity (both residential and employment) and their associated connectivity improvements.

All of these additional factors will have a bearing on travel behaviour and therefore whether or not efforts to encourage modal shift will be considered successful.

Step 13: Considering sensitivity scenarios and extrapolating trends

Sensitivity scenarios may be required to capture the potential impacts of strategic schemes delivered by OCC, including demand management projects (such as the proposed workplace parking levy or the proposed Oxford traffic filters). These will need to be considered appropriately according to the certainty (i.e. funding status, planning permission status, etc.) and likely timing of their delivery. It may also be useful for additional sensitivity scenarios to be tested utilising the LTCP targets of replacing or removing car trips, taking into consideration the discussion of the use of these targets in section 2.5.

Other scenarios may be required to identify whether the identified vehicular impacts based on current behaviour (i.e. the 'do-minimum' scenario) is shown to potentially increase when taking account of trends extrapolated from the TRICS database. This could also be applied to the 'with connectivity' scenario if considered appropriate. If trends extrapolated from the TRICS database indicate an increase in vehicular trips, the potential resulting congestion will also need to be addressed appropriately, i.e. through further connectivity improvements or other means (see discussion in Step 12). This step is important to help illustrate what could happen to travel patterns without the intervention of sustainable and active mode improvements.

The process for acquiring and analysing trend data from TRICS is described in section 16 of the TRICS guidance (2021, p.35) and summarised as follows:

> To establish historic trip trends, it is necessary to undertake a separate TRICS analysis for various time slices (initial advice is 5 year periods but this may be amended if considered appropriate) using a consistent set of filtering parameters for each time slice. The attained information can then be combined into a spreadsheet whereby the individual trip rates for each classification can be compared throughout the individual time slices to create a graph showing how trip rates have changed over time.

Consideration of whether this step is required must be provided in the TA or TS.

3.6.4 Whether these trends actually materialise will need to be carefully monitored (see stage three on monitoring below) and if they do not transpire then the resultant issues will need to be addressed through the S106 agreement as described above. This approach is supported in the TRICS guidance, which states (paragraph 12.3, p.30):

> Should the monitoring and evaluation plan report demonstrate that the forecast trips have [been] exceeded or indeed have not materialised then a revised schedule of transport interventions should be prepared and agreed with the planning and highway authority. In this regard the application of the monitoring regime and commitment in the obligation to follow the findings of the monitoring will be crucial to ensuring that the "decide" element is followed by "provide".

3.6.5 Further to this, assuming that the potential detrimental impacts of congestion on sustainable and active modes and other environmental (including air quality) and ecological receptors can be suitably and satisfactorily ameliorated, it may be acceptable to allow some capacity issues to remain as long as they are only affecting private motor vehicles as this can act as an incentive to change mode choice (Metz, 2018).

3.7 Stage 3: Monitoring and managing outcomes

3.7.1 A fundamental part of implementing the 'decide and provide' approach as advocated in the TRICS guidance is the need to monitor the outcomes of its implementation through the travel plans accompanying development proposals.

3.7.2 In the case of strategic housing or employment sites whose construction programmes span many years, monitoring the trip generation and mode shares over time is particularly important. This will facilitate an understanding of whether the expected trip generation rates identified in the various modelled scenarios are occurring in practice.

3.7.3 Further to this, masterplans and design codes should be devised at the outset to allow for sufficient flexibility so that later phases of development can be adapted to influence travel behaviour and make better provision for active and sustainable modes or change layouts and levels of parking to respond to subsequent changes in policy (for more on this see OCC's Parking Standards for New Developments).

Step 14: Scoping the Monitoring and Evaluation Plan

A Monitoring and Evaluation Plan (MEP) is required where a TA accompanies a planning application. This will be secured and implemented through the travel plan as part of the S106 agreement where needed. As the MEP will potentially inform triggers for further planning obligations, it will need to be drafted and agreed prior to the S106 being finalised.

The MEP will record how the trip generation and mode share of the site evolves over time and the resultant impacts on the highway network. The survey specification will need to be agreed with the appropriate OCC officers and should employ the TRICS Standard Assessment Methodology or similar (as outlined in Section 23 of the TRICS Good Practice Guide, 2025). The survey frequency and number will depend on the scale of the development and the timing of associated infrastructure delivery. Surveys should take place at agreed intervals for at least until the full occupation of the site.

Survey design will need to take account of multi-modal trips from all access points, including walking, wheeling, and cycling only accesses in addition to main vehicular accesses. Attitudinal surveys should also be considered to collect qualitative data around travel behaviours. Additionally, if there are specific junctions of concern in the vicinity of the site, which may experience problems if the anticipated mode shares are not achieved, then monitoring of these locations should be included in the survey scope. It may be appropriate for the requirement for surveys to be triggered based on the time elapsed since implementation and/or on reaching specific levels of occupation. Other data which may need to be recorded in the MEP includes (but is not limited to): public transport patronage figures, car club membership/usage, the use of new (or improved) active travel facilities, and the occurrence of rat running on unsuitable routes.

Survey design should consider how to isolate the impacts of the development and its associated improvements from any third-party effects to the wider transport environment.

If the proposed development generates traffic that will impact on any Air Quality Management Area in the vicinity, the MEP may also be required to monitor these impacts to ensure that vehicular traffic does not exceed that which is anticipated through any of the scenarios based on a reduction in trip rates. The methodology for any such monitoring and the potential ramifications of any exceedances will need to be agreed with OCC and the relevant Local Planning Authority.

Step 15: Determining triggers through monitoring

If a phased approach to off-site connectivity improvements has been agreed the results of the monitoring may be needed to be used to inform the timing of infrastructure delivery being adapted accordingly.

The requirement for monitoring is necessary given the need to ascertain whether the anticipated modal share and vehicular trip reductions, and the trends identified through the extrapolation of historic data, transpire in reality. If they do not, and unacceptable impacts are identified through the monitoring, this may prompt the requirement for further infrastructure improvements or financial contributions, see Step 12 for more on this topic.

3.7.4 As described in the TRICS guidance (2021a, paragraph 11.6, p.29):

> The MEP should reflect the site build out and the timing of the monitoring and evaluation reports agreed with the relevant LPA and the highway authority. If transport outcomes have departed from the trajectories contained within the transport strategy [i.e. transport assessment], then the S106 must contain a mechanism to deal with the divergence from the agreed trip scenario.

3.7.5 In lieu of a more sophisticated (and proportionately less complex) predictive analysis, it is likely to be assumed that the increase (or decrease) in vehicular trip rates will continue at the same rate into the future, when in fact it may become apparent that over time these trends accelerate, decelerate, or plateau.

3.7.6 In the case of large-scale housing sites with a protracted build-out, it is important to monitor trip generation and mode share over multiple years as changes in behaviour may only be realised over a long-term period (Song, *et al,* 2017 and DfT, 2022).

Step 16: Implementing the Monitoring and Evaluation Plan

The costs incurred by OCC having to ensure that the requisite monitoring is carried out by the applicant, plus the resources associated with reviewing the resultant monitoring outputs, will need to be covered by a suitable fee and captured in the S106 agreement. These costs will depend on the scale and complexity of the monitoring (and thus the extent of the outputs) of the site and will therefore be calculated on a site-by-site basis using the adopted schedule of charges for OCC officer time.

Bibliography (NB: all hyperlinks correct at the time of publication)

Cherwell District Council (2015) Cherwell Local Plan 2011-2031: Part One.

Cherwell District Council (2024) Cherwell Local Plan 2042 (Regulation 19 version).

Christiansen, P., *et al* (2017) 'Parking facilities and the built environment: Impacts on travel behaviour', *Transportation Research Part A: Policy and Practice 95, pp.198-206.*

Dalton, A., *et al* (2013) 'Neighbourhood, Route and Workplace-Related Environmental Characteristics Predict Adults' Mode of Travel to Work', *PLoS ONE 8(6): e67575.*

Department for Energy Security and Net Zero (2025) 2023 UK Greenhouse Gas Emissions: Final Figures - Statistical Summary.

DfT (2018) Road Traffic Forecasts 2018: Moving Britain Ahead.

DfT (2019) TAG Unit M4: Forecasting and Uncertainty.

DfT (2020) Local Transport Note 1/20: Cycle Infrastructure Design.

DfT (2021a) Decarbonising Transport: A Better, Greener Britain.

DfT (2021b) Uncertainty Toolkit: TAG Supplementary Guidance.

DfT (2022) Guidance: Enabling behaviour change – information pack.

DfT (2024) National Travel Survey: England 2023 Main Results.

DfT (2025) National Travel Survey 2023: Quality Report.

Guo, Z. (2013) 'Home parking convenience, household car usage, and implications to residential parking policies', *Transport Policy 29, pp.97-106.*

International Transport Forum (2021) Travel Transitions.

Marsden, G., *et al* (2018) All Change? The future of travel demand and the implications for policy and planning, *First Report of the Commission on Travel Demand.*

Metz, D. (2018) 'Tackling urban traffic congestion: The experience of London, Stockholm and Singapore', *Case Studies on Transport Policy 6,* pp.494-498.

MHCLG (2019) The English Indices of Deprivation 2019: Technical Report.

MHCLG (2020) Planning for the Future White Paper.

MHCLG (2024) Proposed reforms to the National Planning Policy Framework and other changes to the planning system.

MHCLG (2024) National Planning Policy Framework.

Office for National Statistics (2022) Travel to work quality information for Census 2021

Oxford City Council (2020) Oxford Local Plan 2036.

Oxford City Council (2025) Oxford Local Plan 2042 (Regulation 18 version).

Oxfordshire County Council (2024) Street Design Guide.

Oxfordshire County Council (2022) Pre-application highways advice.

Oxfordshire County Council (2024) Local Transport and Connectivity Plan.

Oxfordshire County Council (2022) Parking Standards for New Developments

Song, Y., *et al* (2017) 'New walking and cycling infrastructure and modal shift in the UK: A quasi-experimental panel study', *Transportation Research Part A 95*, pp.320-333.

South Oxfordshire District Council (2020) South Oxfordshire Local Plan 2011-2035.

South Oxfordshire and Vale of White Horse district councils (2024) South Oxfordshire and Vale of White Horse Joint Local Plan 2041 (Regulation 19 version).

TCPA (2021) 20-Minute Neighbourhoods.

TfL (2012) Residential Parking Provision in New Developments.

TRICS (2021a) Guidance Note on the Practical Implementation of the Decide & Provide Approach.

TRICS (2025) TRICS Good Practice Guide.

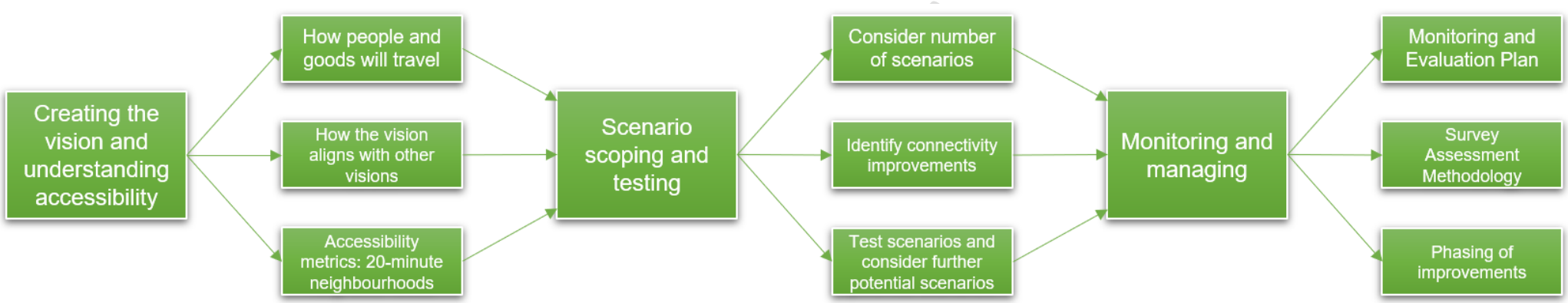
Vale of White Horse District Council (2016) Local Plan 2031: Part One.

Vale of White Horse District Council (2019) Local Plan 2031: Part Two.

West Oxfordshire District Council (2018) West Oxfordshire Local Plan 2031.

West Oxfordshire District Council (2025) West Oxfordshire Local Plan 2041 (Regulation 18 version).

Appendix 1: flow-diagram summarising the implementation process



Stage One (Steps 1-7): **creating the vision and understanding accessibility**

1. Consider how people and goods will travel to and from (and within) the site, set this out in detail as a vision for the proposed development.
2. Articulate how the vision aligns with other relevant visions, including OCC's LTCP, the NPPF, and the local plan.
3. Assess the accessibility characteristics of the site. Provide suitable evidence to establish multi-modal trip rates from TRICS or alternative sources and explain why that evidence is applicable to the context of this proposed development.

Stage Two (Steps 8-13): **scenario scoping and testing**

1. Consider the number of scenarios that will need to be tested. This will depend on the scale of the proposal and the sensitivity and complexity of its location.
2. Identify the connectivity improvement requirements and whether trip rate reductions can be attributed to them based on data from TRICS (or alternative sources) to derive rates for further scenarios.
3. Determine requirements for subsequent scenarios to be tested to identify the phasing of infrastructure or incorporating trends extrapolated from historic TRICS data.

Stage Three (Steps 14-16): **monitoring and managing**

1. Produce the Monitoring and Evaluation Plan to be implemented through the travel plan as part of the S106 legal agreement.
2. Agree the survey assessment methodology with OCC, ensuring that it is multi-modal and appropriately covers the full occupation of the site. Also consider requirements for other impact assessments such as those relating to air quality.
3. Consider the potential requirement for phasing of connectivity improvements and secure this through the S106 and S278 legal agreements.

NB: This flow diagram is not intended as a comprehensive representation of all the necessary process, rather a simplified summary of the key steps.

Appendix 2: worked example - residential development proposal

Development proposal: A total of 1,000 dwellings on a rural site at Brampton Heath Golf Centre to the north of Northampton, with a new footway and new cycleways adjacent to Sandy Lane and a new bus service through the site. Please note that this is a hypothetical example used for illustrative purposes only.

From the description above, the Transport Assessment accompanying the planning application will require multiple scenarios to be modelled as the development proposal would be for over 500 dwellings in a rural area with a new bus service and new walking and cycling infrastructure. Furthermore, multiple scenarios should also be modelled as during the pre-application stage, it is understood that the applicant is seeking to reduce vehicle trip rates in the Transport Assessment as the development proposal would deliver improvements to active and sustainable travel.

Scenario 1: Do Minimum
This scenario uses average trip rates and modes shares of comparable sites from the TRICS database which reflect the existing characteristics of the site, i.e. without connectivity improvements.

This uses multi-modal trip rates obtained from the TRICS database without any adjustments for sites comparable to the application site to reflect existing walking, cycling and public transport infrastructure, as well as proximity to facilities and amenities.

In terms of assessing the proximity characteristics of the application site, the distance from the application site to those essential services that form the 20-minute neighbourhood are stated below.

- Primary School = 1.6km
  The Bramptons Primary School, Harlestone Road
- Secondary School = 4.4km
  Kingsthorpe College, Boughton Green Road
- Supermarket or Local Grocery Shop = 3.0km
  Tesco Express, Link Road
- GP Surgery = 3.3km
  The Pines Surgery, Harborough Road
- Employment = 5.8km
  Moulton Park, Northampton

In terms of assessing the connectivity characteristics of the application site, a review of the area on Google Maps and Street View indicates that no walking or cycling infrastructure exists adjacent to the application site alongside Sandy Lane and no public transport services are accessible within 400m.

A footway does exist alongside Northampton Road, which also forms a route towards the town centre as part of the National Cycle Network. The nearest bus stops are located on Welford Road where the infrequent number 60 service calls.

Select	Reference	Description	Map	Town/City	Area	Location	DWELLS	Status	Reason for Deselection/Automatic Removal
☑	DS-03-A-02	MIXED HOUSES		DERBY	DERBYSHIRE	Edge of Town	371	One-Off	
☑	ES-03-A-03	MIXED HOUSES & FLAT		POLEGATE	EAST SUSSEX	Edge of Town	212	One-Off	
☑	HC-03-A-24	MIXED HOUSES & FLAT		EASTLEIGH	HAMPSHIRE	Edge of Town	243	One-Off	
☑	HC-03-A-25	MIXED HOUSES & FLAT		NEAR SOUTHAMPTON	HAMPSHIRE	Edge of Town	250	Re-Survey	
☑	HC-03-A-26	MIXED HOUSES & FLAT		WHITELEY	HAMPSHIRE	Edge of Town	270	One-Off	
☑	KC-03-A-06	MIXED HOUSES & FLAT		HERNE BAY	KENT	Suburban Area (PPS6 C	363	One-Off	
☑	KC-03-A-07	MIXED HOUSES		HERNE BAY	KENT	Edge of Town	288	One-Off	
☑	NE-03-A-02	SEMI DETACHED & DET		SCUNTHORPE	NORTH EAST LINCOLNSH	Edge of Town	432	One-Off	
☑	NF-03-A-06	MIXED HOUSES		GREAT YARMOUTH	NORFOLK	Edge of Town	275	Re-Survey	
☑	NF-03-A-09	MIXED HOUSES & FLAT		NORWICH	NORFOLK	Edge of Town	984	Re-Survey	
☑	NF-03-A-23	MIXED HOUSES & FLAT		WYMONDHAM	NORFOLK	Edge of Town	514	Re-Survey	
☑	NF-03-A-30	MIXED HOUSES		SWAFFHAM	NORFOLK	Edge of Town	266	Re-Survey	
☑	SC-03-A-05	MIXED HOUSES		HORLEY	SURREY	Edge of Town	207	One-Off	
☑	ST-03-A-07	DETACHED & SEMI-DET		STAFFORD	STAFFORDSHIRE	Edge of Town	248	One-Off	
☑	WS-03-A-06	MIXED HOUSES		WEST HORSHAM	WEST SUSSEX	Edge of Town	799	Re-Survey	
☑	WS-03-A-11	MIXED HOUSES		WEST HORSHAM	WEST SUSSEX	Edge of Town	918	Re-Survey	
☑	WS-03-A-15	MIXED HOUSES		BILLINGSHURST	WEST SUSSEX	Neighbourhood Centre	380	One-Off	

Use the TRICS database to obtain multi-modal trip rates for the *Do Minimum* scenario by identifying suitable surveys undertaken at sites which are comparable to the application site regarding location, proximity to essential services and connectivity characteristics, that is to say, walking, cycling and public transport provision.

The development proposal is for 1,000 dwellings at a site on the edge of Northampton; therefore, interrogation of the TRICS database was undertaken with the parameters stated below.

1) '03 – Residential' in the *Main Land Use* menu
2) 'A – Houses Privately Owned' in the *Sub Land Use* menu
3) 'Calculate Multi-Modal Trip Rates' to obtain mode share data
4) Only residential sites in England (excluding Greater London)
5) Between 200 and 1,800 dwellings in Suburban Area, Edge of Town and Neighbourhood Centre locations, with weekday surveys only

Robust *Primary and Secondary Filtering* of the TRICS database should be undertaken to ensure appropriate surveys are used. Following these two stages of filtering, a review of each site should be undertaken in detail to ensure that it is representative of the application site in terms of existing walking and cycling connections, access to public transport services which have similar frequencies, journey times and number of destinations, as well as proximity to facilities, amenities and essential services.

The interrogation of the TRICS database using the above parameters results in 17 surveys being available to obtain multi-modal trip rates, as shown in the screenshot below.

There is now a requirement to remove all surveys from the *site selection* list which are not representative of the application site, with reasonable justification. Only 3 surveys are considered representative due to connectivity or location characteristics, as shown in the screenshots below.

Select	Reference	Description	Map	Town/City	Area	Location	DWELLS	Status	Reason for Deselection/Automatic Removal
☐	DS-03-A-02	MIXED HOUSES		DERBY	DERBYSHIRE	Edge of Town	371	One-Off	Connectivity Characteristics
☐	ES-03-A-03	MIXED HOUSES & FLAT		POLEGATE	EAST SUSSEX	Edge of Town	212	One-Off	Connectivity Characteristics
☐	HC-03-A-24	MIXED HOUSES & FLAT		EASTLEIGH	HAMPSHIRE	Edge of Town	243	One-Off	Connectivity Characteristics
☐	HC-03-A-25	MIXED HOUSES & FLAT		NEAR SOUTHAMPTON	HAMPSHIRE	Edge of Town	250	Re-Survey	Connectivity Characteristics
☑	HC-03-A-26	MIXED HOUSES & FLAT		WHITELEY	HAMPSHIRE	Edge of Town	270	One-Off	
☐	KC-03-A-06	MIXED HOUSES & FLAT		HERNE BAY	KENT	Suburban Area (PPS6 C	363	One-Off	Connectivity Characteristics
☐	KC-03-A-07	MIXED HOUSES		HERNE BAY	KENT	Edge of Town	288	One-Off	Connectivity Characteristics
☐	NE-03-A-02	SEMI DETACHED & DET		SCUNTHORPE	NORTH EAST LINCOLNSH	Edge of Town	432	One-Off	Connectivity Characteristics
☑	NF-03-A-06	MIXED HOUSES		GREAT YARMOUTH	NORFOLK	Edge of Town	275	Re-Survey	
☐	NF-03-A-09	MIXED HOUSES & FLAT		NORWICH	NORFOLK	Edge of Town	984	Re-Survey	Removed: Site re-surveyed by NF-03-A-22
☑	NF-03-A-23	MIXED HOUSES & FLAT		WYMONDHAM	NORFOLK	Edge of Town	514	Re-Survey	
☐	NF-03-A-30	MIXED HOUSES		SWAFFHAM	NORFOLK	Edge of Town	266	Re-Survey	Location Characteristics
☐	SC-03-A-05	MIXED HOUSES		HORLEY	SURREY	Edge of Town	207	One-Off	Connectivity Characteristics
☐	ST-03-A-07	DETACHED & SEMI-DET		STAFFORD	STAFFORDSHIRE	Edge of Town	248	One-Off	Connectivity Characteristics
☐	WS-03-A-06	MIXED HOUSES		WEST HORSHAM	WEST SUSSEX	Edge of Town	799	Re-Survey	Removed: Site re-surveyed by WS-03-A-11
☐	WS-03-A-11	MIXED HOUSES		WEST HORSHAM	WEST SUSSEX	Edge of Town	918	Re-Survey	Connectivity Characteristics
☐	WS-03-A-15	MIXED HOUSES		BILLINGSHURST	WEST SUSSEX	Neighbourhood Centre	380	One-Off	Location Characteristics

Select	Reference	Date	Day of Week	Survey Type	Description	Town/City	Reason for Deselection/Automatic Removal
☑	HC-03-A-26	24/06/21	Thursday	MULTI-MODAL	MIXED HOUSES & FLATS	WHITELEY	
☑	NF-03-A-06	23/09/19	Monday	MULTI-MODAL	MIXED HOUSES	GREAT YARMOUTH	
☑	NF-03-A-23	22/09/21	Wednesday	MULTI-MODAL	MIXED HOUSES & FLATS	WYMONDHAM	

For the majority of the surveys in the *site selection* list, the nearest bus stops are too close to the relevant site and the frequency of the services which call at these bus stops is much greater than the frequency in proximity to the application site. This could result in a greater mode share for public transport use; therefore, these surveys should not be used to obtain multi-modal trip rates for the *Do Minimum* scenario.

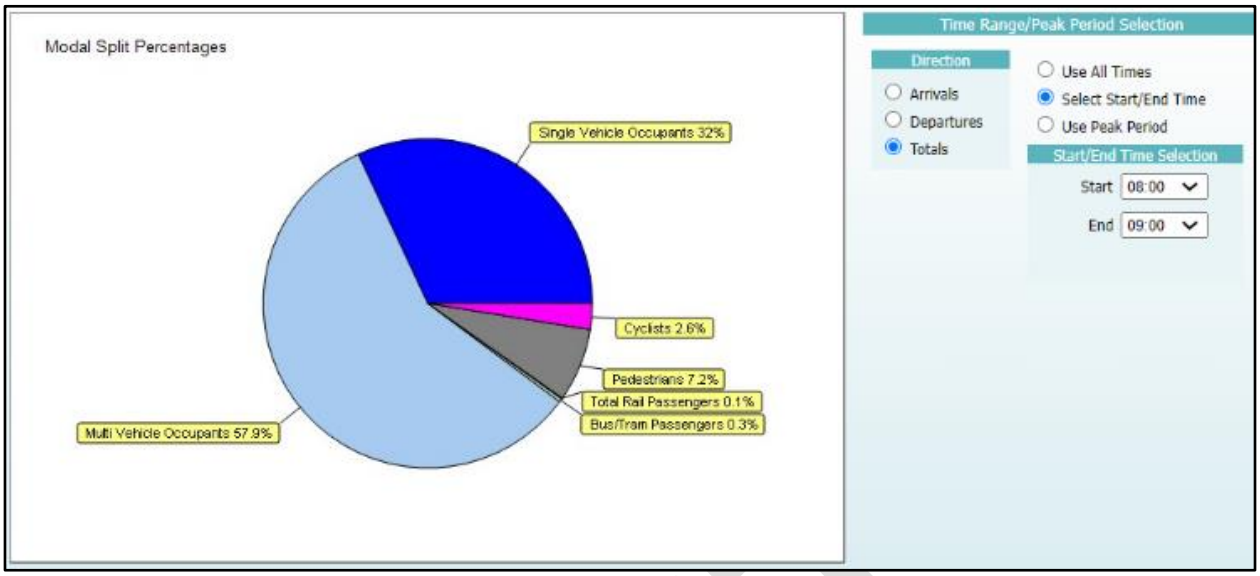
The average multi-modal trip rates from the 3 remaining sites for 'Total People' for both the AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00), as well as between 07:00-19:00 are shown in the table below.

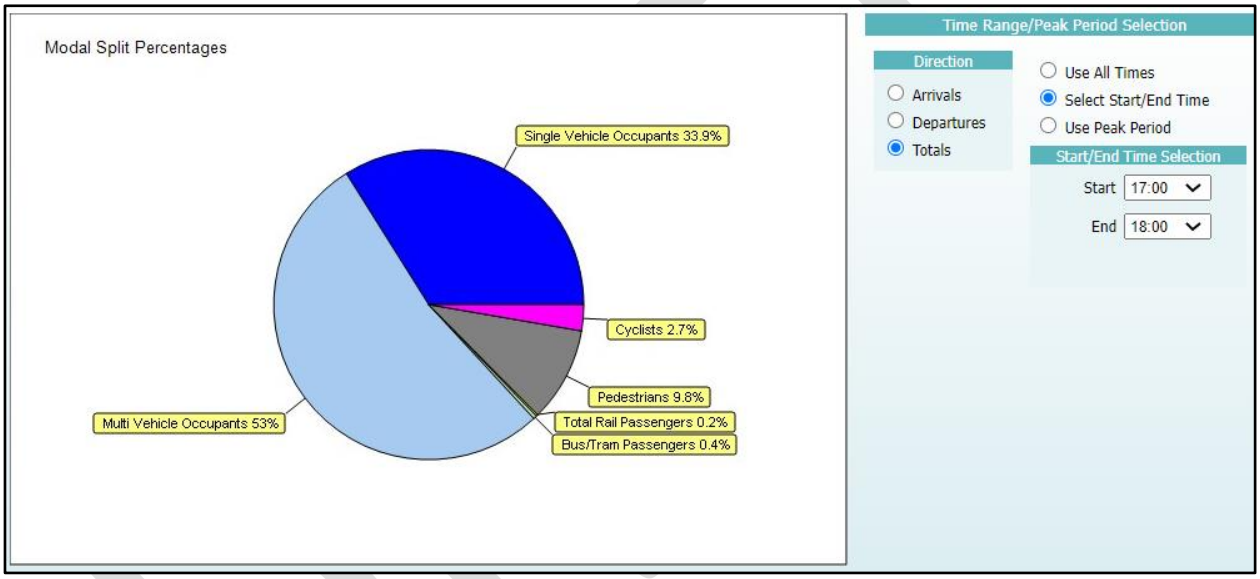
	IN	OUT	TOTAL
AM Peak (08:00-09:00)	0.225	0.869	1.094
PM Peak (17:00-18:00)	0.689	0.320	1.009
12-Hour (07:00-19:00)	3.979	4.167	8.416

The average multi-modal trip rates from the 3 remaining sites for 'Total Vehicles' for both the AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00), as well as between 07:00-19:00 are shown in the table below.

	IN	OUT	TOTAL
AM Peak (08:00-09:00)	0.171	0.444	0.615
PM Peak (17:00-18:00)	0.398	0.179	0.577
12-Hour (07:00-19:00)	2.404	2.425	4.829

The likely mode share of the application site in both the AM peak hour and PM peak hour without the development proposal in place and therefore any walking, cycling and public transport improvements, is shown in the screenshots and the table below.





Transport Mode	AM Peak Hour (08:00-09:00)	PM Peak Hour (17:00-18:00)
	% Share	% Share
Walking	7.2%	9.8%
Cycling	2.6%	2.7%
Public Transport	0.4%	0.6%
Car / Van	89.9%	86.9%

A car/van mode share of 89.9% in the AM peak hour and 86.9% in the PM peak hour appears reasonable given the lack of walking and cycling infrastructure, as well as the lack of public transport services in the area.

Scenario 2: With Connectivity Improvements

This scenario uses average trip rates from the TRICS database, or adjustments to baseline mode shares, which reflect the future characteristics of the site with the development in place and its associated connectivity improvements.

The *With Connectivity Improvements* scenario uses another set of multi-modal trip rates obtained from the TRICS database or adjustments to baseline mode shares from the *Do Minimum* scenario to reflect future walking, cycling and public transport infrastructure and

potential opportunities for residents and visitors to travel by sustainable and active modes of transport, as a result of the development proposal.

As part of the development proposal, a new footway and new cycleways would be provided alongside Sandy Lane to connect with the existing shared footway / cycleway alongside Northampton Road. Additionally, a new bus service through the site towards the town centre with up to 4 services per hour will be provided.

All new infrastructure improvements would be delivered prior to first occupation, so opportunities for residents and visitors to travel by sustainable and active modes of transport would be available from the outset. A primary school, grocery shop and GP surgery would also be provided within the application site which would reduce the distance that residents would have to travel to these essential services.

An interrogation of the TRICS database was undertaken using the same parameters as before, for consistency. A review of each site should be undertaken in detail to ensure that it is representative of the application site in terms of future walking and cycling connections and access to public transport services, while also still comparable regarding proximity to facilities, amenities and essential services.

The interrogation of the TRICS database using the above parameters results in 17 surveys being available to obtain multi-modal trip rates, as shown in the screenshot below.

Select	Reference	Description	Map	Town/City	Area	Location	DWELLS	Status	Reason for Deselection/Automatic Removal
☑	DS-03-A-02	MIXED HOUSES		DERBY	DERBYSHIRE	Edge of Town	371	One-Off	
☑	ES-03-A-03	MIXED HOUSES & FLAT		POLEGATE	EAST SUSSEX	Edge of Town	212	One-Off	
☑	HC-03-A-24	MIXED HOUSES & FLAT		EASTLEIGH	HAMPSHIRE	Edge of Town	243	One-Off	
☑	HC-03-A-25	MIXED HOUSES & FLAT		NEAR SOUTHAMPTON	HAMPSHIRE	Edge of Town	250	Re-Survey	
☑	HC-03-A-26	MIXED HOUSES & FLAT		WHITELEY	HAMPSHIRE	Edge of Town	270	One-Off	
☑	KC-03-A-06	MIXED HOUSES & FLAT		HERNE BAY	KENT	Suburban Area (PPS6 C	363	One-Off	
☑	KC-03-A-07	MIXED HOUSES		HERNE BAY	KENT	Edge of Town	288	One-Off	
☑	NE-03-A-02	SEMI DETACHED & DET		SCUNTHORPE	NORTH EAST LINCOLNSH	Edge of Town	432	One-Off	
☑	NF-03-A-06	MIXED HOUSES		GREAT YARMOUTH	NORFOLK	Edge of Town	275	Re-Survey	
☑	NF-03-A-09	MIXED HOUSES & FLAT		NORWICH	NORFOLK	Edge of Town	984	Re-Survey	
☑	NF-03-A-23	MIXED HOUSES & FLAT		WYMONDHAM	NORFOLK	Edge of Town	514	Re-Survey	
☑	NF-03-A-30	MIXED HOUSES		SWAFFHAM	NORFOLK	Edge of Town	266	Re-Survey	
☑	SC-03-A-05	MIXED HOUSES		HORLEY	SURREY	Edge of Town	207	One-Off	
☑	ST-03-A-07	DETACHED & SEMI-DET		STAFFORD	STAFFORDSHIRE	Edge of Town	248	One-Off	
☑	WS-03-A-06	MIXED HOUSES		WEST HORSHAM	WEST SUSSEX	Edge of Town	799	Re-Survey	
☑	WS-03-A-11	MIXED HOUSES		WEST HORSHAM	WEST SUSSEX	Edge of Town	918	Re-Survey	
☑	WS-03-A-15	MIXED HOUSES		BILLINGSHURST	WEST SUSSEX	Neighbourhood Centre	380	One-Off	

Similar to the previous stage, there is now a requirement to remove all surveys from the *site selection* list which would not be representative of the application site with the development proposal and its associated connectivity improvements in place.

A total of 12 surveys could be used to obtain the alternative multi-modal trip rates as each site has suitable walking and cycling infrastructure in place with representative bus service provision, as shown in the screenshots below.

Select	Reference	Description	Map	Town/City	Area	Location	DWELLS	Status	Reason for Deselection/Automatic Removal
☑	DY-03-A-01	MIXED HOUSES		DERBY	DERBY	Edge of Town	371	One-Off	
☐	ES-03-A-03	MIXED HOUSES & FLAT		POLEGATE	EAST SUSSEX	Edge of Town	212	One-Off	Location Characteristics
☑	HC-03-A-24	MIXED HOUSES & FLAT		EASTLEIGH	HAMPSHIRE	Edge of Town	243	One-Off	
☐	HC-03-A-26	MIXED HOUSES & FLAT		WHITELEY	HAMPSHIRE	Edge of Town	270	One-Off	Connectivity Characteristics
☑	KC-03-A-06	MIXED HOUSES & FLAT		HERNE BAY	KENT	Suburban Area (PPS6 C	363	One-Off	
☑	KC-03-A-07	MIXED HOUSES		HERNE BAY	KENT	Edge of Town	288	One-Off	
☑	NE-03-A-02	SEMI DETACHED & DET		SCUNTHORPE	NORTH EAST LINCOLNSH	Edge of Town	432	One-Off	
☐	NF-03-A-06	MIXED HOUSES		GREAT YARMOUTH	NORFOLK	Edge of Town	275	Re-Survey	Removed: Site re-surveyed by NF-03-A-29
☑	NF-03-A-09	MIXED HOUSES & FLAT		NORWICH	NORFOLK	Edge of Town	984	Re-Survey	
☐	NF-03-A-23	MIXED HOUSES & FLAT		WYMONDHAM	NORFOLK	Edge of Town	514	Re-Survey	Location Characteristics
☑	NF-03-A-30	MIXED HOUSES		SWAFFHAM	NORFOLK	Edge of Town	266	Re-Survey	
☑	SC-03-A-05	MIXED HOUSES		HORLEY	SURREY	Edge of Town	207	Initial Survey	
☑	SP-03-A-02	MIXED HOUSES & FLAT		NEAR SOUTHAMPTON	SOUTHAMPTON	Edge of Town	250	Re-Survey	
☑	ST-03-A-07	DETACHED & SEMI-DET		STAFFORD	STAFFORDSHIRE	Edge of Town	248	One-Off	
☐	WS-03-A-06	MIXED HOUSES		WEST HORSHAM	WEST SUSSEX	Edge of Town	799	Re-Survey	Removed: Site re-surveyed by WS-03-A-11
☑	WS-03-A-11	MIXED HOUSES		WEST HORSHAM	WEST SUSSEX	Edge of Town	918	Re-Survey	
☑	WS-03-A-15	MIXED HOUSES		BILLINGSHURST	WEST SUSSEX	Neighbourhood Centre	380	One-Off	

Select	Reference	Date	Day of Week	Survey Type	Description	Town/City	Reason for Deselection/Automatic Removal
☑	DY-03-A-01	10/07/18	Tuesday	MULTI-MODAL	MIXED HOUSES	DERBY	
☑	HC-03-A-24	10/11/21	Wednesday	MULTI-MODAL	MIXED HOUSES & FLATS	EASTLEIGH	
☑	KC-03-A-06	27/09/17	Wednesday	MULTI-MODAL	MIXED HOUSES & FLATS	HERNE BAY	
☑	KC-03-A-07	27/09/17	Wednesday	MULTI-MODAL	MIXED HOUSES	HERNE BAY	
☑	NE-03-A-02	12/05/14	Monday	MULTI-MODAL	SEMI DETACHED & DETACHED	SCUNTHORPE	
☑	NF-03-A-09	24/09/19	Tuesday	MULTI-MODAL	MIXED HOUSES & FLATS	NORWICH	
☑	NF-03-A-30	23/09/21	Thursday	MULTI-MODAL	MIXED HOUSES	SWAFFHAM	
☑	SC-03-A-05	01/04/19	Monday	MULTI-MODAL	MIXED HOUSES	HORLEY	
☑	SP-03-A-02	12/10/21	Tuesday	MULTI-MODAL	MIXED HOUSES & FLATS	NEAR SOUTHAMPTON	
☑	ST-03-A-07	22/11/17	Wednesday	MULTI-MODAL	DETACHED & SEMI-DETACHED	STAFFORD	
☑	WS-03-A-11	02/04/19	Tuesday	MULTI-MODAL	MIXED HOUSES	WEST HORSHAM	
☑	WS-03-A-15	23/11/21	Tuesday	MULTI-MODAL	MIXED HOUSES	BILLINGSHURST	

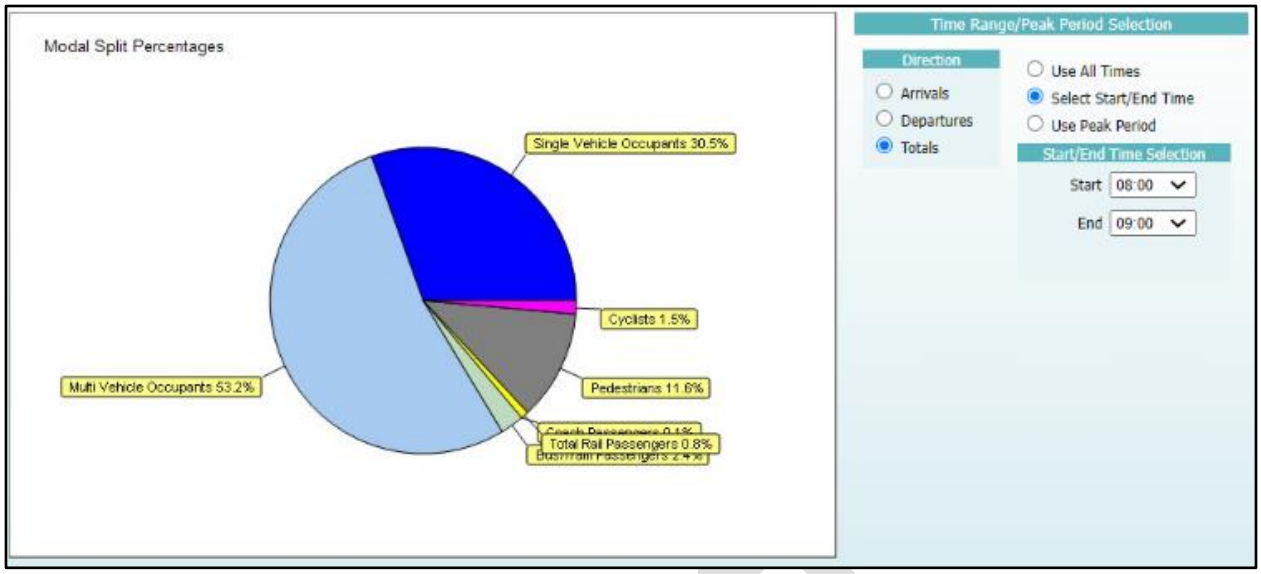
The average multi-modal trip rates from the 12 sites for 'Total People' for both the AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00), as well as between 07:00-19:00 are shown in the table below.

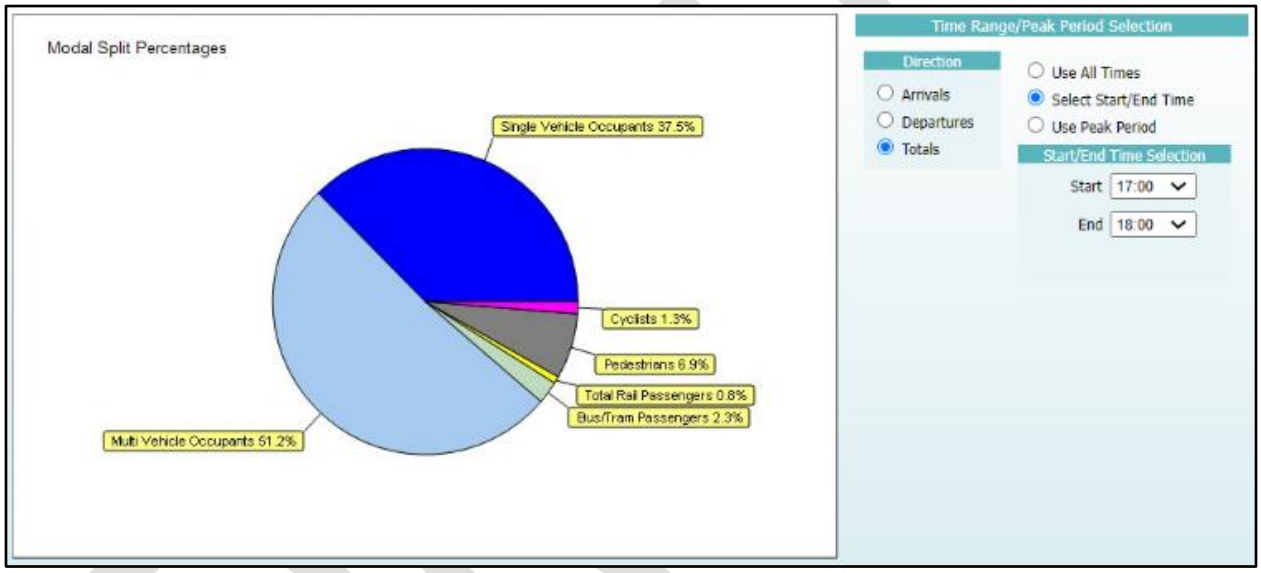
	IN	OUT	TOTAL
AM Peak (08:00-09:00)	0.188	0.727	0.915
PM Peak (17:00-18:00)	0.581	0.248	0.829
12-Hour (07:00-19:00)	3.550	3.554	7.104

The average multi-modal trip rates from the 12 sites for 'Total Vehicles' for both the AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00), as well as between 07:00-19:00 are shown in the table below.

	IN	OUT	TOTAL
AM Peak (08:00-09:00)	0.124	0.360	0.484
PM Peak (17:00-18:00)	0.342	0.151	0.493
12-Hour (07:00-19:00)	2.066	2.081	4.147

The likely mode share of the application site in both the AM peak hour and PM peak hour with the development proposal in place and the improvements to walking, cycling and public transport infrastructure, is shown in the screenshots below.





Transport Mode	AM Peak Hour (08:00-09:00)	PM Peak Hour (17:00-18:00)
	% Share	% Share
Walking	11.6%	6.9%
Cycling	1.5%	1.3%
Public Transport	3.3%	3.1%
Car / Van	83.7%	88.7%

The infrastructure improvements to come forward as part of the development proposal would likely result in a greater proportion of future residents using public transport to travel, with a public transport mode share of 3.3% in the AM peak hour and 3.1% in the PM peak.

Scenario 3: Extrapolated Trends

Scenario 3 is to analyse *Extrapolated Trends* to understand if the identified vehicular impacts based on current behaviour is shown to potentially increase or decrease when taking into consideration trends extrapolated from the TRICS database.

To establish historic trip trends to determine future travel patterns, undertake separate analysis for various time slices using a consistent set of filtering parameters for each.

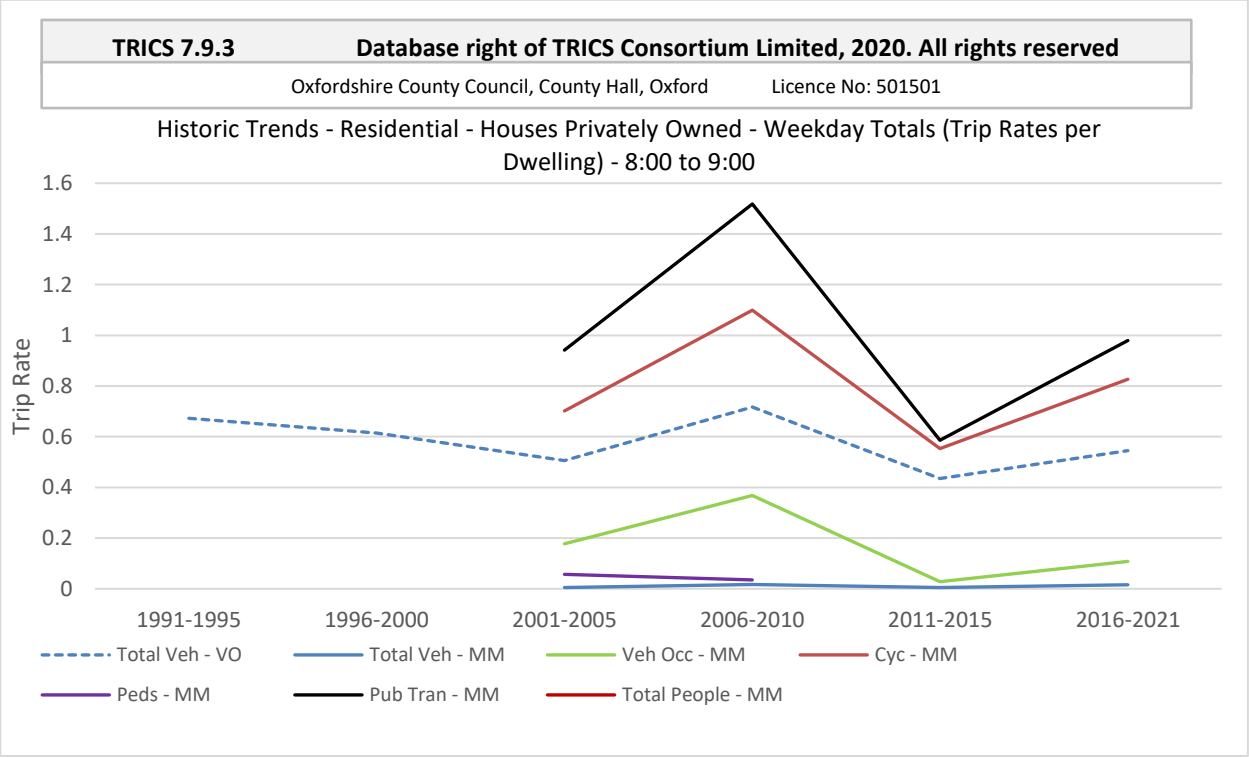
The filtering parameters for each of the time slices is the same as those used to obtain multi-modal trip rates in the *Do Minimum* scenario, as stated below for reference.

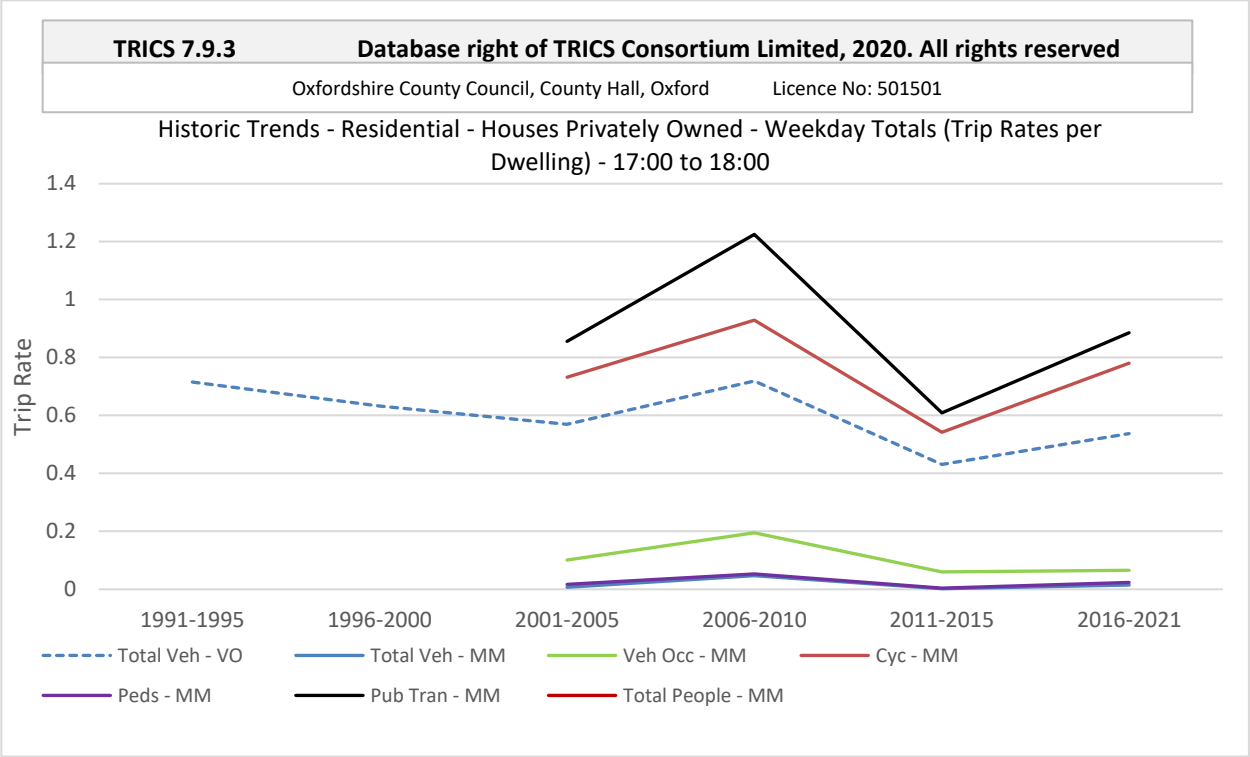
1) '03 – Residential' in the *Main Land Use* menu
2) 'A – Houses Privately Owned' in the *Sub Land Use* menu
3) Only residential sites in England (excluding Greater London)
4) Between 200 and 1,800 dwellings in Suburban Area, Edge of Town and Neighbourhood Centre locations, with weekday surveys only

Scenario 3 can be used to determine historic trip trends for both vehicle only trips and multi-modal trips, although multi-modal data only goes back to the year 2000 so data before this time will only consist of vehicle only data. In this example, six different time slices each of 5 years have been used to determine historic trip trends. Each of the slices contains a different mixture of sites that all meet the defined parameters set out above.

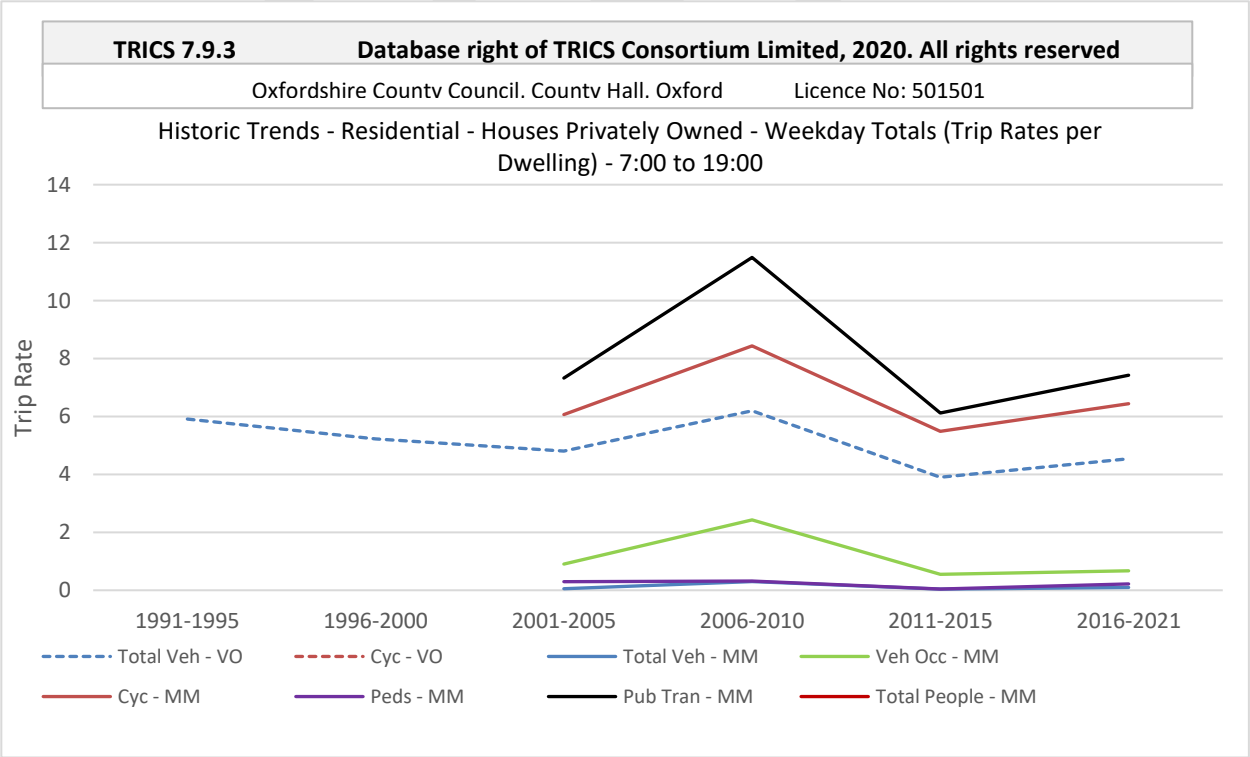
- Time Slice 1: 1991 to 1995
- Time Slice 2: 1996 to 2000
- Time Slice 3: 2001 to 2005
- Time Slice 4: 2006 to 2010
- Time Slice 5: 2011 to 2015
- Time Slice 6: 2016 to 2021

The 'Historic Trends' Excel spreadsheet produced by the TRICS consortium (available here) is used to analyse historic trip trends and generate a graphical representation of these historic trip trends using data from the TRICS database. The graphical representation of historic trip trends for both the AM peak hour and PM peak hour, as well as for between 07:00 and 19:00 hours, are shown below. The multi-modal data is shown from the year 2000 onwards.





The two graphs above suggest that vehicle trip generation from residential developments in similar locations to the one at the application site is likely to continue increasing in the short term in both the AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00) to follow the trend of the previous 5 years. The use of public transport and cycling would surpass car use though over the short term.



The above graph suggests that, while the trip rates of public transport and cycling would be higher than the trip rates for vehicles, the use of all three travel modes would increase at the same rate in the short term to follow the trends of the previous 5 years.

The graphs above can be used to determine likely multi-modal trip rates of the development proposal for specific years in the future, particularly at the time of full occupation of all 1,000 dwellings in 2026, by assuming the historical trends would continue as shown.

The extrapolated multi-modal trip rates for 'Total People' and 'Total Vehicles' in 2026 at the time of full occupation for both the AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00), as well as between 07:00-19:00 are shown in the table below.

	Total People	**Total Vehicles**
	TOTAL	**TOTAL**
AM Peak (08:00-09:00)	1.100	0.650
PM Peak (17:00-18:00)	1.005	0.650
12-Hour (07:00-19:00)	7.200	5.000

A summary of the 'Total People' and 'Total Vehicles' multi-modal trip rates for Scenario 1 (*Do Minimum*), Scenario 2 (*With Connectivity Improvements*) and Scenario 3 (*Extrapolated Trends*) are shown in the table below.

	Total People	**Total Vehicles**
Scenario 1: Do Minimum		
AM Peak (08:00-09:00)	1.094	0.615
PM Peak (17:00-18:00)	1.009	0.577
12-Hour (07:00-19:00)	8.416	4.829
Scenario 2: With Connectivity Improvements		
AM Peak (08:00-09:00)	0.915	0.484
PM Peak (17:00-18:00)	0.829	0.493
12-Hour (07:00-19:00)	7.104	4.147
Scenario 3: Extrapolated Trends		
AM Peak (08:00-09:00)	1.100	0.650
PM Peak (17:00-18:00)	1.005	0.650
12-Hour (07:00-19:00)	7.200	5.000

Appendix 3: Decide and Provide Methodology Checklist *NB. To be read alongside Oxfordshire County Council's Implementing 'Decide & Provide': Requirements for Transport Assessments.* *This checklist is to be agreed with OCC officers and submitted with all transport statements and transport assessments.*				
Date:	Assessed by:	App ref:	Site:	Site description:
Step (these correspond with the steps detailed in Implementing Decide & Provide)	Question(s)	Completed (YES/NO)	Notes (approach taken), plus references to appropriate section of the submitted TA/TS	Has suitably detailed **justification and evidence** been provided for this step of the methodology and its inclusion/exclusion? (text in italics below is for guidance and can be deleted)
1: Creating the vision (p.17)	What is the vision for the site? How has the transport vision been informed by the overall vision for the proposed development? How will people and goods travel to and from (and within) the site? How does the vision align with other relevant visions*? How is the vision to be achieved and how has this been articulated through the masterplan, design code, and off-site connectivity strategies?			**Other relevant visions include: the NPPF; OCC's LTCP; Local Plan; Neighbourhood Plan; and any local needs, issues, and opportunities.*

2: Scoping scenarios for modelling (p.20)	Has more than one multi-modal trip rate scenario been modelled? Has Table 1 (p.19) been reviewed to establish which steps should be followed depending on the scale of the development? Have the characteristics of sensitivity and complexity also been considered and do these warrant the inclusion of other steps?			*The characteristics of scale, sensitivity, and complexity should be considered here. Furthermore, reference must be made to Table 1 (p.19) in Implementing Decide and Provide, this sets out which steps must be followed depending on the scale of the proposed development.*

3: Establishing committed and planned growth assumptions (p.21)	Has background growth been taken into account? Have alternative scenario(s) of background growth been evidenced and modelled?*			**Alternative background growth scenarios are not compulsory but must show that this has been considered.*
4: Reference case modelling (p.21)	Has a suitable reference case been modelled?			

5a: Assessing proximity characteristics (residential) (p.22)	**For residential sites**: Has a 20-minute walk assessment been carried out assessing the walk time to the facilities and services listed in Implementing Decide & Provide?			*This assessment must include:; primary and secondary schools; supermarket / grocery shop; healthcare provision (e.g. GP surgery or pharmacy; and significant area of employment.*
5b: Assessing proximity characteristics (employment) (p.23)	**For employment sites:** Have existing employment sites of similar scale to proposed development been identified, with comparable proximity and scale of nearby settlements and travel options?			

5c: Mixed-use development - internalisation and localisation (p.24)	**For mixed use developments only:** Has internalisation of trips been considered in overall trip generation, and is this evidenced and if necessary, applied appropriately to future year scenarios, taking into account different phases of the build out?			
6: Assessing connectivity characteristics (p.24)	Has an assessment (i.e. an audit) been carried out of the quality of walking, wheeling, and cycling routes and public transport connectivity to the locations in 5a and 5b? How does this quality accord with applicable standards, including LTN1/20?			*e.g. street lighting, types of crossings, widths of footways and cycleways. Take account of any severance. For public transport consider frequency, spread of service by time of day and days of the week, journey times (i.e. directness of service), and key destinations and facilities served.* *If available, using the DfT's Connectivity Tool to supplement this assessment could be considered.*

7: Comparison sites in TRICS and using alternative evidence (p.25)	Have comparable sites been selected from TRICS, taking account of accessibility characteristics in steps 5 and 6? Or has alternative evidence been used? Has supporting text been provided to explain the suitability of the evidence used?			*It may be preferable to use the average trip generation of multiple sites that are broadly similar. Supplementary or alternative evidence may be used, see section 2.2 regarding acceptability.*
8: Modelling the 'do-minimum' scenario (p.26)	Has an appropriate 'do-minimum' scenario been modelled (i.e. without the connectivity improvements)? Has justification for the acceptability of the supporting evidence been provided?			*Should be based on multi-modal trip rates derived from the TRICS database (or other evidentiary sources) using other sites comparable to the current state of the site, i.e. without any of the proposed off-site improvements*

9: Identifying connectivity improvements (p.27)	What connectivity improvements have been identified, with evidence of deliverability and, in the case of public transport services, their ongoing viability? Has the adequacy and quality of these improvements been reported?			*This step must include an assessment of the adequacy and quality of improvements in the context of the NPPF, LTCP, the vision, and relevant standards*
10: Evidencing new trip rates (p.28)	Have comparison sites in TRICS* been identified that more closely reflect similar proposed provision for sustainable modes *and* have the same proximity characteristics as identified in steps 5 and 6? Has suitable evidence been provided to justify the adjusted trip rates†?			**Or suitable evidence from alternative sources.* *†All trip rates used should be multi-modal.*

11: Modelling the 'with connectivity improvements' scenario (p.29)	Has the 'with connectivity improvements' scenario been modelled?			
12: Determining the requirement for further improvements (p.31)	Should the proposed improvements modelled in the previous scenario prove inadequate in addressing the impacts of the development, has consideration been given to the need for further improvements and their modelling? Have highway capacity schemes for private vehicles only been considered after all other options have been explored?			*See the Implementing Decide & Provide document regarding types of further improvements.*

13: Considering sensitivity scenarios and extrapolating trends (p.33)	Has the need for any sensitivity scenarios (for example, to capture the potential impacts of strategic schemes delivered by OCC) been considered? Have trip generation trends been extrapolated from the TRICS database, and another scenario modelled to reflect the trends?			
14-16: Monitoring and managing outcomes (p.35-36)	With appropriate reference to the TRICS Standard Assessment Methodology, has a monitoring and evaluation plan for the S106/S278 agreement been scoped and agreed with OCC officers?			